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Schedule for

# Density-composition tables for aqueous solutions of sulphuric acid

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BSi

# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Laboratory Apparatus Standards Committee (LBC/-) to Technical Committee LBC/5, upon which the following bodies were represented:

British Laboratory Ware Association

Department of Trade and Industry (Laboratory of the Government Chemist)

Department of Trade and Industry (National Weights and Measures Laboratory)

Institute of Brewing

Institute of Petroleum

National Sulphuric Acid Association

Royal Society of Chemistry

Scientific Glassware Association

Scotch Whisky Association

Society of Glass Technology

**Amendments issued since publication**

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# Contents

# Foreword

This British Standard has been prepared under the direction of the Laboratory Apparatus Standards Committee.

This British Standard was first published in 1937 and was revised in 1959. This revision supersedes the 1959 edition which is withdrawn.

The United Kingdom participated in the preparation by Technical Committee TC 47, Chemistry, of the International Organization for Standardization (ISO) of the related ISO Recommendation ISO/R 911:1968, but disapproved it on technical grounds. The United Kingdom maintained the disapproval when ISO/R 911:1968 was converted to ISO 911:1977.

Together with hydrometers the tables provide a simple means of determining the strength of any given aqueous solution of sulphuric acid, or making up a solution of known strength. The tables may, or course, be used with other methods of determining density (for example, see BS 733).

The previous edition of this British Standard made reference to density and specific gravity hydrometers complying with BS 718:1953. When BS 718 was revised in 1979 it was aligned as far as possible with the intentions of Technical Committee 48, Laboratory glassware and related apparatus, of the International Organization for Standardization (ISO). The term "specific gravity" was replaced by "relative density", scales of relative density were excluded, and scales marked in kilograms per cubic metre were introduced as an alternative to grams per millilitre. Users who had a continuing need for relative density hydrometres ($d$ 60/60 °F) were referred to ISO 650.

The readings of a 60/60 °F relative density hydrometer can readily be corrected (see Appendix A) to yield density (in $kg/m^3$) of the liquid at the temperature at which the hydrometer is used.

Within 1 to 2 parts in 1 000, readings at a temperature $t$ (in °C) of a 60/60 °F relative density hydrometer can be taken as the density (in $kg/m^3$) at $t$. To an accuracy which is very frequently adequate (within 1 part in 1 000), the reading at a temperature $t$ between 10 °C and 40 °C on a 20 °C or 15 °C density hydrometer complying with BS 718 may be accepted as the density (in $kg/m^3$) of the liquid at $t$. Density and relative density hydrometers therefore may often be used without correction. Appendix A gives information on how the highest accuracy can be obtained. Recommendations as to the choice of suitable hydrometers for use in connection with these tables are given in Appendix B. Appendix C gives examples of the use of density-composition tables in conjunction with these hydrometers.

The principal differences between BS 753:1959 and this edition are:

a) density, in Table 1, is given in kilograms per cubic metre instead of grams per millilitre;

b) SI units have been used throughout and, where applicable, the tables have been recomputed;

c) recommendations as to the choice of suitable hydrometers for use in conjunction with Table 1 have been revised to accord with BS 718;

d) the temperature calculations given in Table 3 have been computed using the value of the thermal cubical expansion coefficient quoted in ISO 1768 for use in the preparation of measurement tables for liquids.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

**Summary of pages**

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 58, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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## 1 Scope

This British Standard gives a table that enables the composition of an aqueous solution of sulphuric acid to be determined from its density at temperatures between 10 °C and 40 °C.

Appendix A gives information on the corrections which are necessary when density is determined by a hydrometer complying with BS 718[1].

Appendix B gives information on the choice of BS hydrometers that are suitable for the determination of density of sulphuric acid solutions.

Appendix C gives examples of the use of a BS hydrometer in conjunction with Table 1.

NOTE   The titles of the publications referred to in this standard are listed on the inside back cover.

## 2 Basis of Table 1

Table 1 is based on data obtained from the International Critical Tables, 1928, Vol. III, page 56, which are still accepted as authoritative.

It should be observed that the table relates to mass, not to apparent mass in air.

## 3 Application of Table 1

### 3.1 Determination of $D_t$

Table 1 is arranged primarily for ease in determining the strength of an aqueous solution of sulphuric acid of known density. The density of a solution of known strength can, however, be obtained quite readily from the table. Moreover, by the application of small allowances (see Appendix A) Table 1 can be used to find the strength of solutions of known relative density or the relative density of solutions of known strength.

Consider, for example, a solution containing 10 g of $H_2SO_4$ in 100 g of solution, i.e. one for which $g = 10$. By looking up the value of $D_t$ corresponding to the value $g = 10$ under any particular temperature in Table 1, the density of the solution at that temperature can be obtained. Thus, for example, the density of the solution is 1 070 kg/m³ at 10 °C, 1 066 kg/m³ at 20 °C, etc. Due allowance, based on the density of water at the various temperatures concerned, can then be made to find the corresponding relative densities at the same temperature as the acid.

It should be observed that the percentage composition $g$ of a solution is independent of its temperature, but $G$, the number of grams of sulphuric acid in 1 L of solution, varies with the temperature of the solution owing to the change in volume of the solution with change in temperature. Hence, the concentration $G$ should always be associated with a particular temperature. For a given value of $G$ applicable at a particular temperature, Table 1 can be used to obtain the density of the solution at the specified temperature or at any other temperature within the range of the table. The value of $G$ for the solution at temperatures other than the specified one can also be obtained. For example, consider a solution 1 L of which, at 20 °C, contains 200 g of $H_2SO_4$. In Table 1 the value of $D_t$ corresponding to $G = 200$ under 20 °C is 1 123 kg/m³ and the corresponding value of $g$ is 17.8 g. By tracing the value $g = 17.8$ g through the table, and interpolating where necessary, the density $D_t$ at various temperatures of the solution containing 200 g of $H_2SO_4$ in 1 L of solution at 20 °C can be obtained and also the number of grams of $H_2SO_4$ in 1 L of the solution at various temperatures.

The following are examples of values which may thus be obtained.

| $t$ | $H_2SO_4$ in 100 g of solution | Density of solution at $t$ | $H_2SO_4$ in 1 L of solution at $t$ |
|---|---|---|---|
| °C | g | kg/m³ | g |
| 10 | 17.8 | 1 128 | 200 |
| 20 | 17.8 | 1 123 | 200 |
| 30 | 17.8 | 1 117 | 198 |
| 40 | 17.8 | 1 111 | 198 |

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[1] From hereon referred to as a BS hydrometer.

## 3.2 Double entries

Between $D_t = 1\,811$ kg/m³ and $D_t = 1\,846$ kg/m³ two values of $g$ and two of $G$ are given against certain values of $D_t$. This is necessary because the density of mixtures of sulphuric acid and water attains a maximum value at a concentration of approximately 97 g of sulphuric acid in 100 g of solution. Hence, over a small range on each side of the maximum, there are two possible concentrations for each particular density. Both values are given in Table 1, the values for the less concentrated solution being given in light type and those for the more concentrated solution in bold type.

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| **1 000** | 0.0 | 0 | 0.1 | 1 | 0.1 | 1 | 0.1 | 1 | 0.2 | 2 | 0.3 | 3 | 0.3 | 3 |
| **1 001** | 0.2 | 2 | 0.2 | 2 | 0.2 | 3 | 0.3 | 3 | 0.3 | 3 | 0.4 | 4 | 0.5 | 5 |
| **1 002** | 0.3 | 3 | 0.3 | 4 | 0.4 | 4 | 0.4 | 4 | 0.5 | 5 | 0.6 | 6 | 0.6 | 6 |
| **1 003** | 0.5 | 5 | 0.3 | 5 | 0.5 | 5 | 0.6 | 6 | 0.6 | 6 | 0.7 | 7 | 0.8 | 8 |
| **1 004** | 0.6 | 6 | 0.6 | 6 | 0.7 | 7 | 0.7 | 7 | 0.8 | 8 | 0.8 | 8 | 0.9 | 9 |
| **1 005** | 0.7 | 8 | 0.8 | 8 | 0.8 | 8 | 0.9 | 9 | 0.9 | 9 | 1.0 | 10 | 1.1 | 11 |
| **1 006** | 0.9 | 9 | 0.9 | 9 | 1.0 | 10 | 1.0 | 10 | 1.1 | 11 | 1.1 | 11 | 1.2 | 12 |
| **1 007** | 1.0 | 10 | 1.1 | 11 | 1.1 | 11 | 1.2 | 12 | 1.2 | 12 | 1.3 | 13 | 1.4 | 14 |
| **1 008** | 1.2 | 12 | 1.2 | 12 | 1.3 | 13 | 1.3 | 13 | 1.4 | 14 | 1.4 | 14 | 1.5 | 15 |
| **1 009** | 1.3 | 13 | 1.3 | 14 | 1.4 | 14 | 1.5 | 15 | 1.5 | 15 | 1.6 | 16 | 1.7 | 17 |
| **1 010** | 1.5 | 15 | 1.5 | 15 | 1.5 | 16 | 1.6 | 16 | 1.7 | 17 | 1.7 | 17 | 1.8 | 18 |
| **1 011** | 1.6 | 16 | 1.6 | 17 | 1.7 | 17 | 1.8 | 18 | 1.8 | 18 | 1.9 | 19 | 2.0 | 20 |
| **1 012** | 1.7 | 18 | 1.8 | 18 | 1.8 | 19 | 1.9 | 19 | 2.0 | 20 | 2.0 | 21 | 2.1 | 21 |
| **1 013** | 1.9 | 19 | 1.9 | 20 | 2.0 | 20 | 2.0 | 21 | 2.1 | 21 | 2.2 | 22 | 2.3 | 23 |
| **1 014** | 2.0 | 21 | 2.1 | 21 | 2.1 | 22 | 2.2 | 22 | 2.3 | 23 | 2.3 | 24 | 2.4 | 24 |
| **1 015** | 2.2 | 22 | 2.2 | 23 | 2.3 | 23 | 2.3 | 24 | 2.4 | 24 | 2.5 | 25 | 2.6 | 26 |
| **1 016** | 2.3 | 24 | 2.4 | 24 | 2.4 | 25 | 2.5 | 25 | 2.6 | 26 | 2.6 | 27 | 2.7 | 28 |
| **1 017** | 2.5 | 25 | 2.5 | 26 | 2.6 | 26 | 2.6 | 27 | 2.7 | 28 | 2.8 | 28 | 2.9 | 29 |
| **1 018** | 2.6 | 27 | 2.7 | 27 | 2.7 | 28 | 2.8 | 28 | 2.9 | 29 | 2.9 | 30 | 3.0 | 31 |
| **1 019** | 2.8 | 28 | 2.8 | 29 | 2.9 | 29 | 2.9 | 30 | 3.0 | 31 | 3.1 | 31 | 3.2 | 32 |
| **1 020** | 2.9 | 30 | 3.0 | 30 | 3.0 | 31 | 3.1 | 32 | 3.2 | 32 | 3.2 | 33 | 3.3 | 34 |
| **1 021** | 3.1 | 31 | 3.1 | 32 | 3.2 | 32 | 3.2 | 33 | 3.3 | 34 | 3.4 | 35 | 3.5 | 36 |
| **1 022** | 3.2 | 33 | 3.3 | 33 | 3.3 | 34 | 3.4 | 35 | 3.5 | 35 | 3.5 | 36 | 3.6 | 37 |
| **1 023** | 3.4 | 34 | 3.4 | 35 | 3.5 | 35 | 3.5 | 36 | 3.6 | 37 | 3.7 | 38 | 3.8 | 39 |
| **1 024** | 3.5 | 36 | 3.6 | 36 | 3.6 | 37 | 3.7 | 38 | 3.8 | 39 | 3.8 | 39 | 3.9 | 40 |
| **1 025** | 3.6 | 37 | 3.7 | 38 | 3.8 | 39 | 3.8 | 39 | 3.9 | 40 | 4.0 | 41 | 4.1 | 42 |
| **1 026** | 3.8 | 39 | 3.8 | 40 | 3.9 | 40 | 4.0 | 41 | 4.1 | 42 | 4.2 | 43 | 4.2 | 44 |
| **1 027** | 3.9 | 40 | 4.0 | 41 | 4.1 | 42 | 4.1 | 42 | 4.2 | 43 | 4.3 | 44 | 4.4 | 45 |
| **1 028** | 4.1 | 42 | 4.1 | 43 | 4.2 | 43 | 4.3 | 44 | 4.4 | 45 | 4.4 | 46 | 4.5 | 47 |
| **1 029** | 4.2 | 43 | 4.3 | 44 | 4.4 | 45 | 4.4 | 46 | 4.5 | 46 | 4.6 | 47 | 4.7 | 48 |
| **1 030** | 4.4 | 45 | 4.4 | 46 | 4.5 | 46 | 4.6 | 47 | 4.7 | 48 | 4.7 | 49 | 4.9 | 50 |
| **1 031** | 4.5 | 46 | 4.6 | 47 | 4.6 | 48 | 4.7 | 49 | 4.8 | 49 | 4.9 | 51 | 5.0 | 52 |
| **1 032** | 4.7 | 48 | 4.7 | 49 | 4.8 | 49 | 4.9 | 50 | 5.0 | 51 | 5.0 | 52 | 5.1 | 53 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 0.4 | 4 | 0.5 | 5 | 0.6 | 6 | 0.7 | 7 | 0.8 | 8 | 0.9 | 9 | 1.0 | 10 | 1.1 | 11 | 1.2 | 12 | **1 000** |
| 0.5 | 6 | 0.6 | 6 | 0.7 | 7 | 0.8 | 8 | 0.9 | 9 | 1.0 | 10 | 1.1 | 12 | 1.3 | 13 | 1.4 | 14 | **1 001** |
| 0.7 | 7 | 0.8 | 8 | 0.9 | 9 | 1.0 | 10 | 1.1 | 11 | 1.2 | 12 | 1.3 | 13 | 1.4 | 14 | 1.5 | 15 | **1 002** |
| 0.8 | 9 | 0.9 | 9 | 1.0 | 10 | 1.1 | 11 | 1.2 | 12 | 1.3 | 14 | 1.5 | 15 | 1.6 | 16 | 1.7 | 17 | **1 003** |
| 1.0 | 10 | 1.1 | 11 | 1.2 | 12 | 1.3 | 13 | 1.4 | 14 | 1.5 | 15 | 1.6 | 16 | 1.7 | 17 | 1.8 | 18 | **1 004** |
| 1.1 | 12 | 1.2 | 12 | 1.3 | 13 | 1.4 | 14 | 1.5 | 15 | 1.7 | 17 | 1.8 | 18 | 1.9 | 19 | 2.0 | 20 | **1 005** |
| 1.3 | 13 | 1.4 | 14 | 1.5 | 15 | 1.6 | 16 | 1.7 | 17 | 1.8 | 18 | 1.9 | 19 | 2.0 | 20 | 2.2 | 22 | **1 006** |
| 1.4 | 14 | 1.5 | 15 | 1.6 | 16 | 1.7 | 17 | 1.8 | 19 | 2.0 | 20 | 2.1 | 21 | 2.2 | 22 | 2.3 | 22 | **1 007** |
| 1.6 | 16 | 1.7 | 17 | 1.8 | 18 | 1.9 | 19 | 2.0 | 20 | 2.1 | 21 | 2.2 | 22 | 2.4 | 24 | 2.5 | 25 | **1 008** |
| 1.7 | 18 | 1.8 | 18 | 1.9 | 20 | 2.0 | 21 | 2.2 | 22 | 2.3 | 23 | 2.4 | 24 | 2.5 | 25 | 2.6 | 27 | **1 009** |
| 1.9 | 19 | 2.0 | 20 | 2.1 | 21 | 2.2 | 22 | 2.3 | 23 | 2.4 | 25 | 2.5 | 26 | 2.7 | 27 | 2.8 | 28 | **1 010** |
| 2.1 | 21 | 2.1 | 22 | 2.2 | 23 | 2.4 | 24 | 2.5 | 25 | 2.6 | 26 | 2.7 | 27 | 2.8 | 29 | 3.0 | 30 | **1 011** |
| 2.2 | 22 | 2.3 | 23 | 2.4 | 24 | 2.5 | 25 | 2.6 | 27 | 2.7 | 28 | 2.9 | 29 | 3.0 | 30 | 3.1 | 31 | **1 012** |
| 2.4 | 24 | 2.5 | 25 | 2.6 | 26 | 2.7 | 27 | 2.8 | 28 | 2.9 | 29 | 3.0 | 31 | 3.1 | 32 | 3.3 | 33 | **1 013** |
| 2.5 | 25 | 2.6 | 26 | 2.7 | 27 | 2.8 | 29 | 2.9 | 30 | 3.0 | 31 | 3.2 | 32 | 3.3 | 33 | 3.4 | 35 | **1 014** |
| 2.7 | 27 | 2.8 | 28 | 2.9 | 29 | 3.0 | 30 | 3.1 | 31 | 3.2 | 32 | 3.3 | 34 | 3.5 | 35 | 3.6 | 36 | **1 015** |
| 2.8 | 29 | 2.9 | 30 | 3.0 | 31 | 3.1 | 32 | 3.3 | 33 | 3.4 | 34 | 3.6 | 35 | 3.6 | 37 | 3.7 | 38 | **1 016** |
| 3.0 | 30 | 3.1 | 31 | 3.2 | 32 | 3.3 | 33 | 3.4 | 35 | 3.5 | 36 | 3.7 | 37 | 3.8 | 38 | 3.9 | 40 | **1 017** |
| 3.1 | 32 | 3.2 | 33 | 3.3 | 34 | 3.4 | 35 | 3.6 | 36 | 3.7 | 37 | 3.8 | 39 | 3.9 | 40 | 4.1 | 41 | **1 018** |
| 3.3 | 33 | 3.4 | 34 | 3.5 | 35 | 3.6 | 37 | 3.7 | 38 | 3.8 | 39 | 4.0 | 40 | 4.1 | 42 | 4.2 | 43 | **1 019** |
| 3.4 | 35 | 3.5 | 36 | 3.6 | 37 | 3.8 | 38 | 3.9 | 40 | 4.0 | 41 | 4.1 | 42 | 4.2 | 43 | 4.4 | 45 | **1 020** |
| 3.6 | 37 | 3.7 | 38 | 3.8 | 39 | 3.9 | 40 | 4.0 | 41 | 4.2 | 42 | 4.3 | 44 | 4.4 | 45 | 4.5 | 46 | **1 021** |
| 3.7 | 38 | 3.8 | 39 | 4.0 | 40 | 4.1 | 41 | 4.2 | 43 | 4.3 | 44 | 4.4 | 45 | 4.6 | 47 | 4.7 | 48 | **1 022** |
| 3.9 | 40 | 4.0 | 41 | 4.1 | 42 | 4.2 | 43 | 4.3 | 44 | 4.5 | 46 | 4.6 | 47 | 4.7 | 48 | 4.8 | 50 | **1 023** |
| 4.0 | 41 | 4.2 | 43 | 4.3 | 44 | 4.4 | 45 | 4.5 | 46 | 4.6 | 47 | 4.7 | 49 | 4.9 | 50 | 5.0 | 51 | **1 024** |
| 4.2 | 43 | 4.3 | 44 | 4.4 | 45 | 4.5 | 46 | 4.7 | 48 | 4.8 | 49 | 4.9 | 50 | 5.0 | 51 | 5.2 | 53 | **1 025** |
| 4.4 | 45 | 4.5 | 46 | 4.6 | 47 | 4.7 | 48 | 4.8 | 49 | 4.9 | 50 | 5.0 | 52 | 5.2 | 53 | 5.3 | 54 | **1 026** |
| 4.5 | 46 | 4.6 | 47 | 4.7 | 48 | 4.8 | 50 | 5.0 | 51 | 5.1 | 52 | 5.2 | 53 | 5.3 | 55 | 5.5 | 56 | **1 027** |
| 4.7 | 48 | 4.8 | 49 | 4.9 | 50 | 5.0 | 51 | 5.1 | 53 | 5.2 | 54 | 5.4 | 55 | 5.5 | 56 | 5.6 | 58 | **1 028** |
| 4.8 | 49 | 4.9 | 51 | 5.0 | 52 | 5.1 | 53 | 5.3 | 54 | 5.4 | 55 | 5.5 | 57 | 5.6 | 58 | 5.8 | 59 | **1 029** |
| 5.0 | 51 | 5.1 | 52 | 5.2 | 53 | 5.3 | 54 | 5.4 | 56 | 5.5 | 57 | 5.7 | 58 | 5.8 | 60 | 5.9 | 61 | **1 030** |
| 5.1 | 53 | 5.2 | 54 | 5.3 | 55 | 5.4 | 56 | 5.6 | 57 | 5.7 | 59 | 5.8 | 60 | 5.9 | 61 | 6.1 | 65 | **1 031** |
| 5.3 | 54 | 5.4 | 56 | 5.5 | 56 | 5.6 | 58 | 5.7 | 59 | 5.8 | 60 | 6.0 | 62 | 6.1 | 63 | 6.2 | 64 | **1 032** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 033 | 4.8 | 50 | 4.9 | 50 | 4.9 | 51 | 5.0 | 52 | 5.1 | 53 | 5.2 | 54 | 5.3 | 55 |
| 1 034 | 4.9 | 51 | 5.0 | 52 | 5.1 | 53 | 5.2 | 53 | 5.2 | 54 | 5.3 | 55 | 5.4 | 56 |
| 1 035 | 5.1 | 53 | 5.2 | 53 | 5.2 | 54 | 5.3 | 55 | 5.4 | 56 | 5.5 | 57 | 5.6 | 58 |
| 1 036 | 5.2 | 54 | 5.3 | 55 | 5.4 | 56 | 5.5 | 57 | 5.5 | 57 | 5.6 | 58 | 5.7 | 59 |
| 1 037 | 5.4 | 56 | 5.5 | 57 | 5.5 | 57 | 5.6 | 58 | 5.7 | 59 | 5.8 | 60 | 5.9 | 61 |
| 1 038 | 5.5 | 57 | 5.6 | 58 | 5.7 | 59 | 5.8 | 60 | 5.8 | 61 | 5.9 | 62 | 6.0 | 63 |
| 1 039 | 5.7 | 59 | 5.7 | 60 | 5.8 | 60 | 5.9 | 61 | 6.0 | 62 | 6.1 | 63 | 6.2 | 64 |
| 1 040 | 5.8 | 60 | 5.9 | 61 | 6.0 | 62 | 6.0 | 63 | 6.1 | 64 | 6.2 | 65 | 6.3 | 66 |
| 1 041 | 5.9 | 62 | 6.0 | 63 | 6.1 | 64 | 6.2 | 64 | 6.3 | 65 | 6.4 | 66 | 6.5 | 67 |
| 1 042 | 6.1 | 63 | 6.2 | 64 | 6.2 | 65 | 6.3 | 66 | 6.4 | 67 | 6.5 | 68 | 6.6 | 69 |
| 1 043 | 6.2 | 65 | 6.3 | 66 | 6.4 | 67 | 6.5 | 68 | 6.6 | 68 | 6.7 | 69 | 6.8 | 71 |
| 1 044 | 6.4 | 67 | 6.5 | 67 | 6.5 | 68 | 6.6 | 69 | 6.7 | 70 | 6.8 | 71 | 6.9 | 72 |
| 1 045 | 6.5 | 68 | 6.6 | 69 | 6.7 | 70 | 6.8 | 71 | 6.9 | 72 | 7.0 | 73 | 7.1 | 74 |
| 1 046 | 6.7 | 70 | 6.7 | 71 | 6.8 | 71 | 6.9 | 72 | 7.0 | 73 | 7.1 | 74 | 7.2 | 76 |
| 1 047 | 6.8 | 71 | 6.9 | 72 | 7.0 | 73 | 7.1 | 74 | 7.1 | 75 | 7.2 | 76 | 7.4 | 77 |
| 1 048 | 6.9 | 73 | 7.0 | 74 | 7.1 | 75 | 7.2 | 75 | 7.3 | 76 | 7.4 | 77 | 7.5 | 79 |
| 1 049 | 7.1 | 74 | 7.2 | 75 | 7.3 | 76 | 7.3 | 77 | 7.4 | 78 | 7.5 | 79 | 7.7 | 80 |
| 1 050 | 7.2 | 76 | 7.3 | 77 | 7.4 | 78 | 7.5 | 79 | 7.6 | 80 | 7.7 | 81 | 7.8 | 82 |
| 1 051 | 7.4 | 77 | 7.5 | 78 | 7.5 | 79 | 7.6 | 80 | 7.7 | 81 | 7.8 | 82 | 7.9 | 83 |
| 1 052 | 7.5 | 79 | 7.6 | 80 | 7.7 | 81 | 7.8 | 82 | 7.9 | 83 | 8.0 | 84 | 8.1 | 85 |
| 1 053 | 7.6 | 80 | 7.7 | 81 | 7.8 | 82 | 7.9 | 83 | 8.0 | 84 | 8.1 | 86 | 8.2 | 87 |
| 1 054 | 7.8 | 82 | 7.9 | 83 | 8.0 | 84 | 8.1 | 85 | 8.2 | 86 | 8.3 | 87 | 8.4 | 88 |
| 1 055 | 7.9 | 84 | 8.0 | 85 | 8.1 | 85 | 8.2 | 87 | 8.3 | 88 | 8.4 | 89 | 8.5 | 90 |
| 1 056 | 8.1 | 85 | 8.2 | 86 | 8.2 | 87 | 8.3 | 88 | 8.4 | 89 | 8.6 | 90 | 8.7 | 91 |
| 1 057 | 8.2 | 87 | 8.3 | 88 | 8.4 | 89 | 8.5 | 90 | 8.6 | 91 | 8.7 | 92 | 8.8 | 93 |
| 1 058 | 8.3 | 88 | 8.4 | 89 | 8.5 | 90 | 8.6 | 91 | 0.7 | 92 | 8.8 | 93 | 9.0 | 95 |
| 1 059 | 8.5 | 89 | 8.6 | 91 | 8.7 | 92 | 8.8 | 93 | 8.9 | 94 | 9.0 | 95 | 9.1 | 96 |
| 1 060 | 8.6 | 91 | 8.7 | 92 | 8.8 | 93 | 8.9 | 95 | 9.0 | 96 | 9.1 | 97 | 9.2 | 98 |
| 1 061 | 8.7 | 93 | 8.8 | 94 | 8.9 | 95 | 9.1 | 96 | 9.2 | 97 | 9.3 | 98 | 9.4 | 100 |
| 1 062 | 8.9 | 94 | 9.0 | 95 | 9.1 | 96 | 9.2 | 98 | 9.3 | 99 | 9.4 | 100 | 9.5 | 101 |
| 1 063 | 9.0 | 96 | 9.1 | 97 | 9.2 | 98 | 9.3 | 99 | 9.4 | 100 | 9.6 | 102 | 9.7 | 103 |
| 1 064 | 9.2 | 98 | 9.3 | 99 | 9.4 | 100 | 9.5 | 101 | 9.6 | 102 | 9.7 | 103 | 9.8 | 104 |
| 1 065 | 9.3 | 99 | 9.4 | 100 | 9.5 | 101 | 9.6 | 102 | 9.7 | 104 | 9.8 | 105 | 10.0 | 106 |
| 1 066 | 9.4 | 101 | 9.6 | 102 | 9.6 | 103 | 9.8 | 104 | 9.9 | 105 | 10.0 | 106 | 10.1 | 108 |
| 1 067 | 9.6 | 102 | 9.7 | 103 | 9.8 | 104 | 9.9 | 106 | 10.0 | 107 | 10.1 | 108 | 10.2 | 109 |
| 1 068 | 9.7 | 104 | 9.8 | 105 | 9.9 | 106 | 10.0 | 107 | 10.2 | 109 | 10.3 | 110 | 10.4 | 111 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.4 | 56 | 5.5 | 57 | 5.6 | 58 | 5.7 | 59 | 5.9 | 61 | 6.0 | 62 | 6.1 | 63 | 6.2 | 65 | 6.4 | 66 | 1 033 |
| 5.5 | 57 | 5.7 | 59 | 5.8 | 60 | 5.9 | 61 | 6.0 | 62 | 6.1 | 63 | 6.3 | 65 | 6.4 | 66 | 6.5 | 68 | 1 034 |
| 5.7 | 59 | 5.8 | 60 | 5.9 | 61 | 6.0 | 63 | 6.2 | 64 | 6.3 | 65 | 6.4 | 66 | 6.6 | 68 | 6.7 | 69 | 1 035 |
| 5.8 | 61 | 6.0 | 62 | 6.1 | 63 | 6.2 | 64 | 6.3 | 65 | 6.4 | 67 | 6.6 | 68 | 6.7 | 69 | 6.8 | 71 | 1 036 |
| 6.0 | 62 | 6.1 | 63 | 6.2 | 65 | 6.3 | 66 | 6.5 | 67 | 6.6 | 68 | 6.7 | 70 | 6.9 | 71 | 7.0 | 72 | 1 037 |
| 6.1 | 64 | 6.3 | 65 | 6.4 | 66 | 6.5 | 67 | 6.6 | 69 | 6.7 | 70 | 6.9 | 71 | 7.0 | 73 | 7.1 | 74 | 1 038 |
| 6.3 | 65 | 6.4 | 66 | 6.5 | 68 | 6.6 | 69 | 6.8 | 70 | 6.9 | 71 | 7.0 | 73 | 7.2 | 74 | 7.3 | 76 | 1 039 |
| 6.4 | 67 | 6.6 | 68 | 6.7 | 69 | 6.8 | 71 | 6.9 | 72 | 7.0 | 73 | 7.2 | 75 | 7.3 | 76 | 7.4 | 77 | 1 040 |
| 6.6 | 68 | 6.7 | 70 | 6.8 | 71 | 6.9 | 72 | 7.1 | 73 | 7.2 | 75 | 7.3 | 76 | 7.5 | 78 | 7.6 | 79 | 1 041 |
| 6.7 | 70 | 6.9 | 71 | 7.0 | 73 | 7.1 | 74 | 7.2 | 75 | 7.3 | 76 | 7.5 | 78 | 7.6 | 79 | 7.7 | 81 | 1 042 |
| 6.9 | 72 | 7.0 | 73 | 7.1 | 74 | 7.2 | 76 | 7.4 | 77 | 7.5 | 78 | 7.6 | 79 | 7.8 | 81 | 7.9 | 82 | 1 043 |
| 7.0 | 73 | 7.1 | 75 | 7.3 | 76 | 7.4 | 77 | 7.5 | 78 | 7.6 | 80 | 7.8 | 81 | 7.9 | 83 | 8.0 | 84 | 1 044 |
| 7.2 | 75 | 7.3 | 76 | 7.4 | 77 | 7.5 | 79 | 7.7 | 80 | 7.8 | 81 | 7.9 | 83 | 8.1 | 84 | 8.2 | 86 | 1 045 |
| 7.3 | 77 | 7.4 | 78 | 7.6 | 79 | 7.7 | 80 | 7.8 | 82 | 7.9 | 83 | 8.1 | 84 | 8.2 | 86 | 8.4 | 87 | 1 046 |
| 7.5 | 78 | 7.6 | 79 | 7.7 | 81 | 7.8 | 82 | 8.0 | 83 | 8.1 | 85 | 8.2 | 86 | 8.4 | 88 | 8.5 | 89 | 1 047 |
| 7.6 | 80 | 7.7 | 81 | 7.9 | 82 | 8.0 | 84 | 8.1 | 85 | 8.2 | 86 | 8.4 | 88 | 8.5 | 89 | 8.7 | 91 | 1 048 |
| 7.8 | 81 | 7.9 | 83 | 8.0 | 84 | 8.1 | 85 | 8.3 | 87 | 8.4 | 88 | 8.5 | 89 | 8.7 | 91 | 8.8 | 92 | 1 049 |
| 7.9 | 83 | 8.0 | 84 | 8.1 | 86 | 8.3 | 87 | 8.4 | 88 | 8.5 | 90 | 8.7 | 91 | 8.8 | 93 | 9.0 | 94 | 1 050 |
| 8.1 | 85 | 8.2 | 86 | 8.3 | 87 | 8.4 | 89 | 8.6 | 90 | 8.7 | 91 | 8.8 | 93 | 9.0 | 94 | 9.1 | 96 | 1 051 |
| 8.2 | 86 | 8.3 | 88 | 8.4 | 89 | 8.6 | 90 | 8.7 | 92 | 8.8 | 93 | 9.0 | 94 | 9.1 | 96 | 9.3 | 97 | 1 052 |
| 8.3 | 88 | 8.5 | 89 | 8.6 | 90 | 8.7 | 92 | 8.9 | 93 | 9.0 | 95 | 9.1 | 96 | 9.3 | 98 | 9.4 | 99 | 1 053 |
| 8.5 | 89 | 8.6 | 91 | 8.8 | 92 | 8.9 | 93 | 9.0 | 95 | 9.1 | 96 | 9.3 | 98 | 9.4 | 99 | 9.6 | 101 | 1 054 |
| 8.6 | 91 | 8.8 | 92 | 8.9 | 94 | 9.0 | 95 | 9.2 | 97 | 9.3 | 98 | 9.4 | 99 | 9.6 | 101 | 9.7 | 102 | 1 055 |
| 8.8 | 93 | 8.9 | 94 | 9.0 | 95 | 9.2 | 97 | 9.3 | 98 | 9.4 | 100 | 9.6 | 101 | 9.7 | 102 | 9.9 | 104 | 1 056 |
| 8.9 | 94 | 9.0 | 96 | 9.2 | 97 | 9.3 | 98 | 9.4 | 100 | 9.6 | 101 | 9.7 | 103 | 9.9 | 104 | 10.0 | 106 | 1 057 |
| 9.1 | 96 | 9.2 | 97 | 9.3 | 99 | 9.5 | 100 | 9.6 | 101 | 9.7 | 103 | 9.9 | 104 | 10.0 | 106 | 10.2 | 107 | 1 058 |
| 9.2 | 97 | 9.3 | 99 | 9.5 | 100 | 9.6 | 101 | 9.7 | 103 | 9.9 | 104 | 10.0 | 106 | 10.2 | 107 | 10.3 | 109 | 1 059 |
| 9.4 | 99 | 9.5 | 100 | 9.6 | 102 | 9.8 | 103 | 9.9 | 105 | 10.0 | 106 | 10.2 | 107 | 10.3 | 109 | 10.4 | 111 | 1 060 |
| 9.5 | 101 | 9.6 | 102 | 9.7 | 103 | 9.9 | 105 | 10.0 | 106 | 10.2 | 108 | 10.3 | 109 | 10.4 | 111 | 10.6 | 112 | 1 061 |
| 9.7 | 102 | 9.8 | 104 | 9.9 | 105 | 10.0 | 107 | 10.2 | 108 | 10.3 | 109 | 10.5 | 111 | 10.6 | 113 | 10.7 | 114 | 1 062 |
| 9.8 | 104 | 9.9 | 105 | 10.0 | 107 | 10.2 | 108 | 10.3 | 110 | 10.5 | 111 | 10.6 | 113 | 10.7 | 114 | 10.9 | 116 | 1 063 |
| 9.9 | 106 | 10.1 | 107 | 10.2 | 108 | 10.3 | 110 | 10.5 | 111 | 10.6 | 113 | 10.8 | 114 | 10.9 | 116 | 11.0 | 118 | 1 064 |
| 10.1 | 107 | 10.2 | 109 | 10.3 | 110 | 10.5 | 112 | 10.6 | 113 | 10.8 | 114 | 10.9 | 116 | 11.0 | 118 | 11.2 | 119 | 1 065 |
| 10.2 | 109 | 10.4 | 110 | 10.5 | 112 | 10.6 | 113 | 10.8 | 115 | 10.9 | 116 | 11.0 | 118 | 11.2 | 119 | 11.3 | 121 | 1 066 |
| 10.4 | 111 | 10.5 | 112 | 10.6 | 113 | 10.8 | 115 | 10.9 | 117 | 11.0 | 118 | 11.2 | 119 | 11.3 | 121 | 11.5 | 123 | 1 067 |
| 10.5 | 112 | 10.6 | 114 | 10.8 | 115 | 10.9 | 117 | 11.1 | 118 | 11.2 | 120 | 11.3 | 121 | 11.5 | 123 | 11.6 | 124 | 1 068 |

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### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 069 | 9.9 | 105 | 10.0 | 107 | 10.1 | 108 | 10.2 | 109 | 10.3 | 110 | 10.4 | 111 | 10.5 | 113 |
| 1 070 | 10.0 | 107 | 10.1 | 108 | 10.2 | 109 | 10.3 | 110 | 10.4 | 112 | 10.6 | 113 | 10.7 | 114 |
| 1 071 | 10.1 | 109 | 10.3 | 110 | 10.3 | 111 | 10.5 | 112 | 10.6 | 113 | 10.7 | 115 | 10.8 | 116 |
| 1 072 | 10.3 | 110 | 10.4 | 111 | 10.5 | 112 | 10.6 | 114 | 10.7 | 115 | 10.8 | 116 | 11.0 | 117 |
| 1 073 | 10.4 | 112 | 10.5 | 113 | 10.6 | 114 | 10.7 | 115 | 10.9 | 117 | 11.0 | 118 | 11.1 | 119 |
| 1 074 | 10.6 | 113 | 10.7 | 114 | 10.8 | 116 | 10.9 | 117 | 11.0 | 118 | 11.1 | 120 | 11.2 | 121 |
| 1 075 | 10.7 | 115 | 10.8 | 116 | 10.9 | 117 | 11.0 | 118 | 11.1 | 120 | 11.3 | 121 | 11.4 | 122 |
| 1 076 | 10.8 | 116 | 10.9 | 118 | 11.0 | 119 | 11.2 | 120 | 11.3 | 121 | 11.4 | 123 | 11.5 | 124 |
| 1 077 | 11.0 | 118 | 11.1 | 119 | 11.2 | 120 | 11.3 | 122 | 11.4 | 123 | 11.6 | 124 | 11.7 | 126 |
| 1 078 | 11.1 | 120 | 11.2 | 121 | 11.3 | 122 | 11.4 | 123 | 11.6 | 125 | 11.7 | 126 | 11.8 | 127 |
| 1 079 | 11.2 | 121 | 11.4 | 122 | 11.5 | 124 | 11.6 | 125 | 11.7 | 126 | 11.8 | 128 | 11.9 | 129 |
| 1 080 | 11.4 | 123 | 11.5 | 125 | 11.6 | 125 | 11.7 | 127 | 11.8 | 128 | 12.0 | 129 | 12.1 | 130 |
| 1 081 | 11.5 | 124 | 11.6 | 126 | 11.7 | 127 | 11.9 | 128 | 12.0 | 130 | 12.1 | 131 | 12.2 | 132 |
| 1 082 | 11.6 | 126 | 11.8 | 127 | 11.9 | 129 | 12.0 | 130 | 12.1 | 131 | 12.3 | 133 | 12.4 | 134 |
| 1 083 | 11.8 | 128 | 11.9 | 129 | 12.0 | 130 | 12.1 | 131 | 12.3 | 133 | 12.4 | 134 | 12.5 | 135 |
| 1 084 | 11.9 | 129 | 12.0 | 131 | 12.1 | 132 | 12.3 | 133 | 12.4 | 134 | 12.5 | 136 | 12.6 | 137 |
| 1 085 | 12.1 | 131 | 12.2 | 132 | 12.3 | 133 | 12.4 | 135 | 12.5 | 136 | 12.7 | 137 | 12.8 | 139 |
| 1 086 | 12.2 | 132 | 12.3 | 134 | 12.4 | 135 | 12.5 | 136 | 12.7 | 138 | 12.8 | 139 | 12.9 | 140 |
| 1 087 | 12.3 | 134 | 12.4 | 135 | 12.6 | 137 | 12.7 | 138 | 12.8 | 139 | 12.9 | 141 | 13.1 | 142 |
| 1 088 | 12.5 | 136 | 12.6 | 137 | 12.7 | 138 | 12.8 | 139 | 12.9 | 141 | 13.1 | 142 | 13.2 | 144 |
| 1 089 | 12.6 | 137 | 12.7 | 138 | 12.8 | 140 | 13.0 | 141 | 13.1 | 142 | 13.2 | 144 | 13.3 | 145 |
| 1 090 | 12.7 | 139 | 12.9 | 140 | 13.0 | 141 | 13.1 | 143 | 13.2 | 144 | 13.4 | 146 | 13.5 | 147 |
| 1 091 | 12.9 | 140 | 13.0 | 142 | 13.1 | 143 | 13.2 | 144 | 13.4 | 146 | 13.5 | 147 | 14.6 | 149 |
| 1 092 | 13.0 | 142 | 13.1 | 143 | 13.2 | 145 | 13.4 | 146 | 13.5 | 147 | 13.6 | 149 | 13.8 | 150 |
| 1 093 | 13.1 | 144 | 13.3 | 145 | 13.4 | 146 | 13.5 | 148 | 13.6 | 149 | 13.8 | 151 | 13.9 | 152 |
| 1 094 | 13.3 | 145 | 13.4 | 146 | 13.5 | 148 | 13.6 | 149 | 13.8 | 151 | 13.9 | 152 | 14.0 | 154 |
| 1 095 | 13.4 | 147 | 13.5 | 148 | 13.6 | 149 | 13.8 | 151 | 13.9 | 152 | 14.0 | 154 | 14.2 | 155 |
| 1 096 | 13.5 | 148 | 13.7 | 150 | 13.8 | 151 | 13.9 | 153 | 14.0 | 154 | 14.2 | 155 | 14.3 | 157 |
| 1 007 | 13.7 | 150 | 13.8 | 151 | 13.9 | 153 | 14.1 | 154 | 14.2 | 155 | 14.3 | 157 | 14.5 | 159 |
| 1 098 | 13.8 | 152 | 13.9 | 153 | 14.1 | 154 | 14.2 | 156 | 14.3 | 157 | 14.5 | 159 | 14.6 | 160 |
| 1 099 | 13.9 | 153 | 14.1 | 155 | 14.2 | 156 | 14.3 | 157 | 14.5 | 159 | 14.6 | 160 | 14.7 | 162 |
| 1 100 | 14.1 | 155 | 14.2 | 156 | 14.3 | 158 | 14.5 | 159 | 14.6 | 160 | 14.7 | 162 | 14.9 | 163 |
| 1 101 | 14.2 | 156 | 14.3 | 158 | 14.5 | 159 | 14.6 | 161 | 14.7 | 162 | 14.9 | 164 | 15.0 | 165 |
| 1 102 | 14.3 | 158 | 14.5 | 159 | 14.6 | 161 | 14.7 | 162 | 14.9 | 164 | 15.0 | 165 | 15.1 | 167 |
| 1 103 | 14.5 | 160 | 14.6 | 161 | 14.7 | 162 | 14.9 | 164 | 15.0 | 165 | 15.1 | 167 | 15.3 | 168 |
| 1 104 | 14.6 | 161 | 14.7 | 163 | 14.9 | 164 | 15.0 | 166 | 15.1 | 167 | 15.3 | 169 | 15.4 | 170 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 10.7 | 114 | 10.8 | 115 | 10.9 | 117 | 11.1 | 118 | 11.2 | 120 | 11.3 | 121 | 11.5 | 123 | 11.6 | 124 | 11.8 | 126 | **1 069** |
| 10.8 | 116 | 10.9 | 117 | 11.1 | 118 | 11.2 | 120 | 11.3 | 121 | 11.5 | 123 | 11.5 | 123 | 11.6 | 124 | 11.9 | 128 | **1 070** |
| 10.9 | 117 | 11.1 | 119 | 11.2 | 120 | 11.3 | 121 | 11.5 | 123 | 11.6 | 125 | 11.6 | 125 | 11.8 | 126 | 12.1 | 129 | **1 071** |
| 11.1 | 119 | 11.2 | 120 | 11.3 | 122 | 11.5 | 123 | 11.6 | 125 | 11.8 | 126 | 11.9 | 128 | 12.1 | 129 | 12.2 | 131 | **1 072** |
| 11.2 | 120 | 11.4 | 122 | 11.5 | 123 | 11.6 | 125 | 11.8 | 126 | 11.9 | 128 | 12.1 | 129 | 12.2 | 131 | 12.4 | 133 | **1 073** |
| 11.4 | 122 | 11.5 | 123 | 11.6 | 125 | 11.8 | 126 | 11.9 | 128 | 12.1 | 130 | 12.2 | 131 | 12.4 | 133 | 12.5 | 134 | **1 074** |
| 11.5 | 124 | 11.6 | 125 | 11.8 | 127 | 11.9 | 128 | 12.1 | 130 | 12.2 | 131 | 12.4 | 133 | 12.5 | 134 | 12.7 | 136 | **1 075** |
| 11.6 | 125 | 11.8 | 127 | 11.9 | 128 | 12.1 | 130 | 12.2 | 131 | 12.3 | 133 | 12.5 | 134 | 12.6 | 136 | 12.8 | 138 | **1 076** |
| 11.8 | 127 | 11.9 | 128 | 12.1 | 130 | 12.2 | 131 | 12.3 | 133 | 12.5 | 135 | 12.6 | 136 | 12.8 | 138 | 12.9 | 139 | **1 077** |
| 11.9 | 129 | 12.1 | 130 | 12.2 | 132 | 12.3 | 133 | 12.5 | 135 | 12.6 | 136 | 12.8 | 138 | 12.9 | 139 | 13.1 | 141 | **1 078** |
| 12.1 | 130 | 12.2 | 132 | 12.3 | 133 | 12.5 | 135 | 12.6 | 136 | 12.8 | 138 | 12.9 | 140 | 13.1 | 141 | 13.2 | 143 | **1 079** |
| 12.2 | 132 | 12.3 | 133 | 12.5 | 135 | 12.6 | 136 | 12.8 | 138 | 12.9 | 140 | 13.1 | 141 | 13.2 | 143 | 13.4 | 144 | **1 080** |
| 12.4 | 134 | 12.5 | 135 | 12.6 | 137 | 12.8 | 138 | 12.9 | 140 | 13.1 | 141 | 13.2 | 143 | 13.4 | 144 | 13.5 | 146 | **1 081** |
| 12.5 | 135 | 12.6 | 137 | 12.8 | 138 | 12.9 | 140 | 13.1 | 141 | 13.2 | 143 | 13.4 | 144 | 13.5 | 146 | 13.7 | 148 | **1 082** |
| 12.6 | 137 | 12.8 | 138 | 12.9 | 140 | 13.1 | 141 | 13.2 | 143 | 13.4 | 145 | 13.5 | 146 | 13.6 | 148 | 13.8 | 149 | **1 083** |
| 12.8 | 139 | 12.9 | 140 | 13.1 | 142 | 13.2 | 143 | 13.3 | 145 | 13.5 | 146 | 13.6 | 148 | 13.8 | 149 | 13.9 | 151 | **1 084** |
| 12.9 | 140 | 13.1 | 142 | 13.2 | 143 | 13.3 | 145 | 13.5 | 146 | 13.6 | 148 | 13.8 | 149 | 13.9 | 151 | 14.1 | 153 | **1 085** |
| 13.1 | 142 | 13.2 | 143 | 13.3 | 145 | 13.5 | 146 | 13.6 | 148 | 13.8 | 150 | 13.9 | 151 | 14.1 | 153 | 14.2 | 155 | **1 086** |
| 13.2 | 143 | 13.3 | 145 | 13.5 | 146 | 13.6 | 148 | 13.8 | 150 | 13.9 | 151 | 14.1 | 153 | 14.2 | 154 | 14.4 | 156 | **1 087** |
| 13.3 | 145 | 13.5 | 147 | 13.6 | 148 | 13.8 | 150 | 13.9 | 151 | 14.1 | 153 | 14.2 | 154 | 14.4 | 156 | 14.5 | 158 | **1 088** |
| 13.5 | 147 | 13.6 | 148 | 13.8 | 150 | 13.9 | 151 | 14.0 | 153 | 14.2 | 155 | 14.3 | 156 | 14.5 | 158 | 14.7 | 160 | **1 089** |
| 13.6 | 148 | 13.7 | 150 | 13.9 | 151 | 14.0 | 153 | 14.2 | 155 | 14.3 | 156 | 14.5 | 158 | 14.6 | 160 | 14.8 | 161 | **1 090** |
| 13.7 | 150 | 13.9 | 152 | 14.0 | 153 | 14.2 | 155 | 14.3 | 156 | 14.5 | 158 | 14.6 | 160 | 14.8 | 161 | 14.9 | 163 | **1 091** |
| 13.9 | 152 | 14.0 | 153 | 14.2 | 155 | 14.3 | 156 | 14.5 | 158 | 14.6 | 160 | 14.8 | 161 | 14.9 | 163 | 15.1 | 165 | **1 092** |
| 14.0 | 153 | 14.2 | 155 | 14.3 | 156 | 14.5 | 158 | 14.6 | 160 | 14.8 | 161 | 14.9 | 163 | 15.1 | 165 | 15.2 | 166 | **1 093** |
| 14.2 | 155 | 14.3 | 157 | 14.5 | 158 | 14.6 | 160 | 14.7 | 161 | 14.9 | 163 | 15.1 | 165 | 15.2 | 166 | 15.4 | 168 | **1 094** |
| 14.3 | 157 | 14.4 | 158 | 14.6 | 160 | 14.7 | 162 | 14.9 | 163 | 15.0 | 165 | 15.2 | 167 | 15.4 | 168 | 15.5 | 170 | **1 095** |
| 14.4 | 158 | 14.6 | 160 | 14.7 | 161 | 14.9 | 163 | 15.0 | 165 | 15.2 | 166 | 15.3 | 168 | 15.5 | 170 | 15.6 | 172 | **1 096** |
| 14.6 | 160 | 14.7 | 161 | 14.9 | 163 | 15.0 | 165 | 15.2 | 166 | 15.3 | 168 | 15.5 | 170 | 15.6 | 171 | 15.8 | 173 | **1 097** |
| 14.7 | 162 | 14.9 | 163 | 15.0 | 165 | 15.2 | 167 | 15.3 | 168 | 15.5 | 170 | 15.6 | 172 | 15.8 | 173 | 15.9 | 175 | **1 098** |
| 14.9 | 163 | 15.0 | 165 | 15.2 | 166 | 15.3 | 168 | 15.4 | 170 | 15.6 | 171 | 15.8 | 173 | 15.9 | 175 | 16.1 | 177 | **1 099** |
| 15.0 | 165 | 15.1 | 167 | 15.3 | 168 | 15.4 | 170 | 15.6 | 171 | 15.7 | 173 | 15.9 | 175 | 16.1 | 177 | 16.2 | 178 | **1 100** |
| 15.1 | 167 | 15.3 | 168 | 15.4 | 170 | 15.6 | 172 | 15.7 | 173 | 15.9 | 175 | 16.0 | 177 | 16.2 | 178 | 16.3 | 180 | **1 101** |
| 15.3 | 168 | 15.4 | 170 | 15.6 | 172 | 15.7 | 173 | 15.9 | 175 | 16.0 | 177 | 16.2 | 178 | 16.3 | 180 | 16.5 | 182 | **1 102** |
| 15.4 | 170 | 15.6 | 172 | 15.7 | 173 | 15.9 | 175 | 16.0 | 177 | 16.2 | 178 | 16.3 | 180 | 16.5 | 182 | 16.6 | 183 | **1 103** |
| 15.5 | 171 | 15.7 | 173 | 15.8 | 175 | 16.0 | 177 | 16.2 | 178 | 16.3 | 180 | 16.5 | 182 | 16.6 | 183 | 16.8 | 185 | **1 104** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 105 | 14.7 | 163 | 14.9 | 164 | 15.0 | 166 | 15.1 | 167 | 15.3 | 169 | 15.4 | 170 | 15.5 | 172 |
| 1 106 | 14.9 | 165 | 15.0 | 166 | 15.1 | 167 | 15.3 | 169 | 15.4 | 170 | 15.5 | 172 | 15.7 | 173 |
| 1 107 | 15.0 | 166 | 15.1 | 168 | 15.3 | 169 | 15.4 | 170 | 15.5 | 172 | 15.7 | 173 | 15.8 | 175 |
| 1 108 | 15.1 | 168 | 15.3 | 169 | 15.4 | 171 | 15.5 | 172 | 15.7 | 174 | 15.8 | 175 | 15.9 | 177 |
| 1 109 | 15.3 | 169 | 15.4 | 171 | 15.5 | 172 | 15.7 | 174 | 15.8 | 175 | 15.9 | 177 | 16.1 | 178 |
| 1 110 | 15.4 | 171 | 15.5 | 173 | 15.7 | 174 | 15.8 | 175 | 15.9 | 177 | 16.1 | 178 | 16.2 | 180 |
| 1 111 | 15.5 | 173 | 15.7 | 174 | 15.8 | 176 | 15.9 | 177 | 16.1 | 179 | 16.2 | 180 | 16.4 | 182 |
| 1 112 | 15.7 | 174 | 15.8 | 176 | 15.9 | 177 | 16.1 | 179 | 16.2 | 180 | 16.4 | 182 | 16.5 | 183 |
| 1 113 | 15.8 | 176 | 15.9 | 177 | 16.1 | 179 | 16.2 | 180 | 16.3 | 182 | 16.5 | 183 | 16.6 | 185 |
| 1 114 | 15.9 | 177 | 16.1 | 179 | 16.2 | 180 | 16.3 | 182 | 16.5 | 183 | 16.6 | 185 | 16.8 | 187 |
| 1 115 | 16.1 | 179 | 16.2 | 181 | 16.3 | 182 | 16.5 | 184 | 16.6 | 185 | 16.8 | 187 | 16.9 | 188 |
| 1 116 | 16.2 | 181 | 16.3 | 182 | 16.5 | 184 | 16.6 | 185 | 16.7 | 187 | 16.9 | 188 | 17.0 | 190 |
| 1 117 | 16.3 | 182 | 16.5 | 184 | 16.6 | 185 | 16.7 | 187 | 16.9 | 189 | 17.0 | 190 | 17.2 | 192 |
| 1 118 | 16.5 | 184 | 16.6 | 185 | 16.7 | 187 | 16.9 | 189 | 17.0 | 190 | 17.2 | 192 | 17.3 | 193 |
| 1 119 | 16.6 | 186 | 16.7 | 187 | 16.9 | 189 | 17.0 | 190 | 17.2 | 192 | 17.3 | 194 | 17.4 | 195 |
| 1 120 | 16.7 | 187 | 16.9 | 189 | 17.0 | 190 | 17.1 | 192 | 17.3 | 194 | 17.4 | 195 | 17.6 | 197 |
| 1 121 | 16.9 | 189 | 17.0 | 190 | 17.1 | 192 | 17.3 | 194 | 17.4 | 195 | 17.6 | 197 | 17.7 | 198 |
| 1 122 | 17.0 | 191 | 17.1 | 192 | 17.3 | 194 | 17.4 | 195 | 17.5 | 197 | 17.7 | 199 | 17.8 | 200 |
| 1 123 | 17.1 | 192 | 17.3 | 194 | 17.4 | 195 | 17.5 | 197 | 17.7 | 199 | 17.8 | 200 | 18.0 | 202 |
| 1 124 | 17.2 | 194 | 17.4 | 195 | 17.5 | 197 | 17.7 | 199 | 17.8 | 200 | 18.0 | 202 | 18.1 | 203 |
| 1 125 | 17.4 | 196 | 17.5 | 197 | 17.7 | 199 | 17.8 | 200 | 17.9 | 202 | 18.1 | 204 | 18.2 | 205 |
| 1 126 | 17.5 | 197 | 17.6 | 199 | 17.8 | 200 | 17.9 | 202 | 18.1 | 204 | 18.2 | 205 | 18.4 | 207 |
| 1 127 | 17.6 | 199 | 17.8 | 200 | 17.9 | 202 | 18.1 | 204 | 18.2 | 205 | 18.4 | 207 | 18.5 | 208 |
| 1 128 | 17.8 | 200 | 17.9 | 202 | 18.1 | 204 | 18.2 | 205 | 18.3 | 207 | 18.5 | 209 | 18.6 | 210 |
| 1 129 | 17.9 | 202 | 18.0 | 204 | 18.2 | 205 | 18.3 | 207 | 18.5 | 209 | 18.6 | 210 | 18.8 | 212 |
| 1 130 | 18.0 | 204 | 18.2 | 205 | 18.3 | 207 | 18.5 | 209 | 18.6 | 210 | 18.8 | 212 | 18.9 | 214 |
| 1 131 | 18.2 | 205 | 18.3 | 207 | 18.4 | 209 | 18.6 | 210 | 18.7 | 212 | 18.9 | 214 | 19.0 | 215 |
| 1 132 | 18.3 | 207 | 18.4 | 209 | 18.6 | 210 | 18.7 | 212 | 18.9 | 214 | 19.0 | 215 | 19.2 | 217 |
| 1 133 | 18.4 | 209 | 18.6 | 210 | 18.7 | 212 | 18.9 | 214 | 19.0 | 215 | 19.2 | 217 | 19.3 | 219 |
| 1 134 | 18.5 | 210 | 18.7 | 212 | 18.8 | 214 | 19.0 | 215 | 19.1 | 217 | 19.3 | 219 | 19.4 | 220 |
| 1 135 | 18.7 | 212 | 18.8 | 214 | 19.0 | 215 | 19.1 | 217 | 19.3 | 219 | 19.4 | 220 | 19.6 | 222 |
| 1 136 | 18.8 | 214 | 18.9 | 215 | 19.1 | 217 | 19.2 | 219 | 19.4 | 220 | 19.6 | 222 | 19.7 | 224 |
| 1 137 | 18.9 | 215 | 19.1 | 217 | 19.2 | 219 | 19.4 | 220 | 19.5 | 222 | 19.7 | 224 | 19.8 | 226 |
| 1 138 | 19.1 | 217 | 19.2 | 218 | 19.4 | 220 | 19.5 | 222 | 19.7 | 224 | 19.8 | 226 | 20.0 | 227 |
| 1 139 | 19.2 | 219 | 19.3 | 220 | 19.5 | 222 | 19.6 | 224 | 19.8 | 225 | 19.9 | 227 | 20.1 | 229 |
| 1 140 | 19.3 | 220 | 19.5 | 222 | 19.6 | 224 | 19.8 | 225 | 19.9 | 227 | 20.1 | 229 | 20.2 | 231 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in $kg/m^3$) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 15.7 | 173 | 15.8 | 175 | 16.0 | 177 | 16.1 | 178 | 16.3 | 180 | 16.4 | 182 | 16.6 | 183 | 16.7 | 185 | 16.9 | 187 | **1 105** |
| 15.8 | 175 | 16.0 | 177 | 16.1 | 178 | 16.3 | 180 | 16.4 | 182 | 16.6 | 183 | 16.7 | 185 | 16.9 | 187 | 17.0 | 188 | **1 106** |
| 16.0 | 177 | 16.1 | 178 | 16.3 | 180 | 16.4 | 182 | 16.6 | 183 | 16.7 | 185 | 16.9 | 187 | 17.0 | 188 | 17.2 | 190 | **1 107** |
| 16.1 | 178 | 16.2 | 180 | 16.4 | 182 | 16.5 | 183 | 16.7 | 185 | 16.8 | 187 | 17.0 | 188 | 17.2 | 190 | 17.3 | 192 | **1 108** |
| 16.2 | 180 | 16.4 | 182 | 16.5 | 183 | 16.7 | 185 | 16.8 | 187 | 17.0 | 188 | 17.1 | 190 | 17.3 | 192 | 17.5 | 194 | **1 109** |
| 16.4 | 182 | 16.5 | 183 | 16.7 | 185 | 16.8 | 187 | 17.0 | 188 | 17.1 | 190 | 17.3 | 192 | 17.4 | 193 | 17.6 | 195 | **1 110** |
| 16.5 | 183 | 16.6 | 185 | 16.8 | 187 | 17.0 | 188 | 17.1 | 190 | 17.3 | 192 | 17.4 | 194 | 17.6 | 195 | 17.7 | 197 | **1 111** |
| 16.6 | 185 | 16.8 | 187 | 16.9 | 188 | 17.1 | 190 | 17.2 | 192 | 17.4 | 193 | 17.6 | 195 | 17.7 | 197 | 17.9 | 199 | **1 112** |
| 16.8 | 187 | 16.9 | 188 | 17.1 | 190 | 17.2 | 192 | 17.4 | 193 | 17.5 | 195 | 17.7 | 197 | 17.8 | 199 | 18.0 | 200 | **1 113** |
| 16.9 | 188 | 17.1 | 190 | 17.2 | 192 | 17.4 | 193 | 17.5 | 195 | 17.7 | 197 | 17.8 | 199 | 18.0 | 200 | 18.2 | 202 | **1 114** |
| 17.0 | 190 | 17.2 | 192 | 17.3 | 193 | 17.5 | 195 | 17.7 | 197 | 17.8 | 199 | 18.0 | 200 | 18.1 | 202 | 18.3 | 204 | **1 115** |
| 17.2 | 192 | 17.3 | 193 | 17.5 | 195 | 17.6 | 197 | 17.8 | 199 | 17.9 | 200 | 18.1 | 202 | 18.3 | 204 | 18.4 | 206 | **1 116** |
| 17.3 | 193 | 17.5 | 195 | 17.6 | 197 | 17.8 | 198 | 17.9 | 200 | 18.1 | 202 | 18.2 | 204 | 18.4 | 206 | 18.6 | 207 | **1 117** |
| 17.4 | 195 | 17.6 | 197 | 17.7 | 198 | 17.9 | 200 | 18.1 | 202 | 18.2 | 204 | 18.4 | 205 | 18.5 | 207 | 18.7 | 209 | **1 118** |
| 17.6 | 197 | 17.7 | 198 | 17.9 | 200 | 18.0 | 202 | 18.2 | 204 | 18.3 | 205 | 18.5 | 207 | 18.7 | 209 | 18.8 | 211 | **1 119** |
| 17.7 | 198 | 17.9 | 200 | 18.0 | 202 | 18.2 | 204 | 18.3 | 205 | 18.5 | 207 | 18.6 | 209 | 18.8 | 211 | 19.0 | 212 | **1 120** |
| 17.9 | 200 | 18.0 | 202 | 18.2 | 203 | 18.3 | 205 | 18.5 | 207 | 18.6 | 209 | 18.8 | 211 | 18.9 | 212 | 19.1 | 214 | **1 121** |
| 18.0 | 202 | 18.1 | 204 | 18.3 | 205 | 18.4 | 207 | 18.6 | 209 | 18.8 | 210 | 18.9 | 212 | 19.1 | 214 | 19.2 | 216 | **1 122** |
| 18.1 | 203 | 18.3 | 205 | 18.4 | 207 | 18.6 | 209 | 18.7 | 210 | 18.9 | 212 | 19.1 | 214 | 19.2 | 216 | 19.4 | 218 | **1 123** |
| 18.3 | 205 | 18.4 | 207 | 18.6 | 209 | 18.7 | 210 | 18.9 | 212 | 19.0 | 214 | 19.2 | 216 | 19.4 | 218 | 19.5 | 219 | **1 124** |
| 18.4 | 207 | 18.5 | 209 | 18.7 | 210 | 18.9 | 212 | 19.0 | 214 | 19.2 | 216 | 19.3 | 217 | 19.5 | 219 | 19.7 | 221 | **1 125** |
| 18.5 | 209 | 18.7 | 210 | 18.8 | 212 | 19.0 | 214 | 19.1 | 216 | 19.3 | 217 | 19.5 | 219 | 19.6 | 221 | 19.8 | 223 | **1 126** |
| 18.7 | 210 | 18.8 | 212 | 19.0 | 214 | 19.1 | 215 | 19.3 | 217 | 19.4 | 219 | 19.6 | 221 | 19.8 | 223 | 19.9 | 225 | **1 127** |
| 18.8 | 212 | 18.9 | 214 | 19.1 | 216 | 19.3 | 217 | 19.4 | 219 | 19.6 | 221 | 19.7 | 223 | 19.9 | 224 | 20.1 | 226 | **1 128** |
| 18.9 | 214 | 19.1 | 215 | 19.2 | 217 | 19.4 | 219 | 19.6 | 221 | 19.7 | 223 | 19.9 | 224 | 20.0 | 226 | 20.2 | 228 | **1 129** |
| 19.1 | 215 | 19.2 | 217 | 19.4 | 219 | 19.5 | 221 | 19.7 | 222 | 19.8 | 224 | 20.0 | 226 | 20.2 | 228 | 20.3 | 230 | **1 130** |
| 19.2 | 217 | 19.3 | 219 | 19.5 | 221 | 19.7 | 222 | 19.8 | 224 | 20.0 | 226 | 20.1 | 228 | 20.3 | 230 | 20.5 | 232 | **1 131** |
| 19.3 | 219 | 19.5 | 221 | 19.6 | 222 | 19.8 | 224 | 20.0 | 226 | 20.1 | 228 | 20.3 | 230 | 20.4 | 231 | 20.6 | 233 | **1 132** |
| 19.5 | 220 | 19.6 | 222 | 19.8 | 224 | 19.9 | 226 | 20.1 | 228 | 20.3 | 229 | 20.4 | 231 | 20.6 | 233 | 20.7 | 235 | **1 133** |
| 19.6 | 222 | 19.7 | 224 | 19.9 | 226 | 20.1 | 228 | 20.2 | 229 | 20.4 | 231 | 20.6 | 233 | 20.7 | 235 | 20.9 | 237 | **1 134** |
| 19.7 | 224 | 19.9 | 226 | 20.0 | 227 | 20.2 | 229 | 20.4 | 231 | 20.5 | 233 | 20.7 | 235 | 20.9 | 237 | 21.0 | 239 | **1 135** |
| 19.9 | 226 | 20.0 | 227 | 20.2 | 229 | 20.3 | 231 | 20.5 | 233 | 20.7 | 235 | 20.8 | 237 | 21.0 | 238 | 21.1 | 240 | **1 136** |
| 20.0 | 227 | 20.1 | 229 | 20.3 | 231 | 20.5 | 233 | 20.6 | 234 | 20.8 | 236 | 21.0 | 238 | 21.1 | 240 | 21.3 | 242 | **1 137** |
| 20.1 | 229 | 20.3 | 231 | 20.4 | 233 | 20.6 | 234 | 20.8 | 236 | 20.9 | 238 | 21.1 | 240 | 21.3 | 242 | 21.4 | 244 | **1 138** |
| 20.3 | 231 | 20.4 | 232 | 20.6 | 234 | 20.7 | 236 | 20.9 | 238 | 21.0 | 240 | 21.2 | 242 | 21.4 | 244 | 21.5 | 245 | **1 139** |
| 20.4 | 232 | 20.5 | 234 | 20.7 | 236 | 20.9 | 238 | 21.0 | 240 | 21.2 | 242 | 21.4 | 244 | 21.5 | 245 | 21.7 | 247 | **1 140** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 141 | 19.4 | 222 | 19.6 | 224 | 19.7 | 225 | 19.9 | 227 | 20.1 | 229 | 20.2 | 231 | 20.4 | 232 |
| 1 142 | 19.6 | 223 | 19.7 | 225 | 19.9 | 227 | 20.0 | 229 | 20.2 | 230 | 20.3 | 232 | 20.5 | 234 |
| 1 143 | 19.7 | 225 | 19.8 | 227 | 20.0 | 229 | 20.2 | 230 | 20.3 | 232 | 20.5 | 234 | 20.6 | 236 |
| 1 144 | 19.8 | 227 | 20.0 | 228 | 20.1 | 230 | 20.3 | 232 | 20.4 | 234 | 20.6 | 236 | 20.8 | 237 |
| 1 145 | 20.0 | 229 | 20.1 | 230 | 20.3 | 232 | 20.4 | 234 | 20.6 | 236 | 20.7 | 237 | 20.9 | 239 |
| 1 146 | 20.1 | 230 | 20.2 | 232 | 20.4 | 234 | 20.5 | 236 | 20.7 | 237 | 20.9 | 239 | 21.0 | 241 |
| 1 147 | 20.2 | 232 | 20.4 | 234 | 20.5 | 235 | 20.7 | 237 | 20.8 | 239 | 21.0 | 241 | 21.1 | 242 |
| 1 148 | 20.3 | 234 | 20.5 | 235 | 20.6 | 237 | 20.8 | 239 | 21.0 | 241 | 21.1 | 242 | 21.3 | 244 |
| 1 149 | 20.5 | 235 | 20.6 | 237 | 20.8 | 239 | 20.9 | 240 | 21.1 | 242 | 21.2 | 244 | 21.4 | 246 |
| 1 150 | 20.6 | 237 | 20.8 | 239 | 20.9 | 240 | 21.1 | 242 | 21.2 | 244 | 21.4 | 246 | 21.5 | 248 |
| 1 151 | 20.7 | 239 | 20.9 | 240 | 21.0 | 242 | 21.2 | 244 | 21.3 | 246 | 21.5 | 247 | 21.7 | 249 |
| 1 152 | 20.9 | 240 | 21.0 | 242 | 21.2 | 244 | 21.3 | 246 | 21.5 | 247 | 21.6 | 249 | 21.8 | 251 |
| 1 153 | 21.0 | 242 | 21.1 | 244 | 21.3 | 245 | 21.5 | 247 | 21.6 | 249 | 21.8 | 251 | 21.9 | 253 |
| 1 154 | 21.1 | 244 | 21.3 | 245 | 21.4 | 247 | 21.6 | 249 | 21.7 | 251 | 21.9 | 253 | 22.1 | 254 |
| 1 155 | 21.2 | 245 | 21.4 | 247 | 21.6 | 249 | 21.7 | 251 | 21.9 | 253 | 22.0 | 254 | 22.2 | 256 |
| 1 156 | 21.4 | 247 | 21.5 | 249 | 21.7 | 251 | 21.8 | 252 | 22.0 | 254 | 22.2 | 256 | 22.3 | 258 |
| 1 157 | 21.5 | 249 | 21.7 | 250 | 21.8 | 252 | 22.0 | 254 | 22.1 | 256 | 22.3 | 258 | 22.4 | 260 |
| 1 158 | 21.6 | 250 | 21.8 | 252 | 21.9 | 254 | 22.1 | 256 | 22.3 | 258 | 22.4 | 260 | 22.6 | 261 |
| 1 159 | 21.8 | 252 | 21.9 | 254 | 22.1 | 256 | 22.2 | 258 | 22.4 | 259 | 22.5 | 261 | 22.7 | 263 |
| 1 160 | 21.9 | 254 | 22.0 | 256 | 22.2 | 257 | 22.4 | 259 | 22.5 | 261 | 22.7 | 263 | 22.8 | 265 |
| 1 161 | 22.0 | 256 | 22.2 | 257 | 22.3 | 259 | 22.5 | 261 | 22.6 | 263 | 22.8 | 265 | 23.0 | 267 |
| 1 162 | 22.1 | 257 | 22.3 | 259 | 22.5 | 261 | 22.6 | 263 | 22.8 | 265 | 22.9 | 266 | 23.1 | 268 |
| 1 163 | 22.3 | 259 | 22.4 | 261 | 22.6 | 263 | 22.7 | 264 | 22.9 | 266 | 23.1 | 268 | 23.2 | 270 |
| 1 164 | 22.4 | 261 | 22.6 | 262 | 22.7 | 264 | 22.9 | 266 | 23.0 | 268 | 23.2 | 270 | 23.3 | 272 |
| 1 165 | 22.5 | 262 | 22.7 | 264 | 22.8 | 266 | 23.0 | 268 | 23.2 | 270 | 23.3 | 272 | 23.5 | 274 |
| 1 166 | 22.6 | 264 | 22.8 | 266 | 23.0 | 268 | 23.1 | 270 | 23.3 | 271 | 23.4 | 273 | 23.6 | 275 |
| 1 167 | 22.8 | 266 | 22.9 | 268 | 23.1 | 269 | 23.2 | 271 | 23.4 | 273 | 23.6 | 275 | 23.7 | 277 |
| 1 168 | 22.9 | 267 | 23.1 | 269 | 23.2 | 271 | 23.4 | 273 | 23.5 | 275 | 23.7 | 277 | 23.9 | 279 |
| 1 169 | 23.0 | 269 | 23.2 | 271 | 23.3 | 273 | 23.5 | 275 | 23.7 | 277 | 23.8 | 278 | 24.0 | 280 |
| 1 170 | 23.2 | 271 | 23.3 | 273 | 23.5 | 275 | 23.6 | 276 | 23.8 | 278 | 23.9 | 280 | 24.1 | 282 |
| 1 171 | 23.3 | 273 | 23.4 | 274 | 23.6 | 276 | 23.8 | 278 | 23.9 | 280 | 24.1 | 282 | 24.2 | 284 |
| 1 172 | 23.4 | 274 | 23.6 | 276 | 23.7 | 278 | 23.9 | 280 | 24.0 | 282 | 24.2 | 284 | 24.4 | 286 |
| 1 173 | 23.5 | 276 | 23.7 | 278 | 23.8 | 280 | 24.0 | 282 | 24.2 | 283 | 24.3 | 285 | 24.5 | 287 |
| 1 174 | 23.7 | 278 | 23.8 | 280 | 24.0 | 282 | 24.1 | 283 | 24.3 | 285 | 24.5 | 287 | 24.6 | 289 |
| 1 175 | 23.8 | 279 | 23.9 | 281 | 24.1 | 283 | 24.3 | 285 | 24.4 | 287 | 24.6 | 289 | 24.7 | 291 |
| 1 176 | 23.9 | 281 | 24.1 | 283 | 24.2 | 285 | 24.4 | 287 | 24.5 | 289 | 24.7 | 291 | 24.9 | 292 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 20.5 | 234 | 20.7 | 236 | 20.8 | 238 | 21.0 | 240 | 21.2 | 241 | 21.3 | 243 | 21.5 | 245 | 21.7 | 247 | 21.8 | 249 | **1 141** |
| 20.7 | 236 | 20.8 | 238 | 21.0 | 239 | 21.1 | 241 | 21.3 | 243 | 21.5 | 245 | 21.6 | 247 | 21.8 | 249 | 21.9 | 251 | **1 142** |
| 20.8 | 238 | 20.9 | 239 | 21.1 | 241 | 21.3 | 243 | 21.4 | 245 | 21.6 | 247 | 21.8 | 249 | 21.9 | 251 | 22.1 | 252 | **1 143** |
| 20.9 | 239 | 21.1 | 241 | 21.2 | 243 | 21.4 | 245 | 21.6 | 247 | 21.7 | 248 | 21.9 | 250 | 22.1 | 252 | 22.2 | 254 | **1 144** |
| 21.0 | 241 | 21.2 | 243 | 21.4 | 245 | 21.5 | 247 | 21.7 | 248 | 21.9 | 250 | 22.0 | 252 | 22.2 | 254 | 22.3 | 256 | **1 145** |
| 21.2 | 243 | 21.3 | 244 | 21.5 | 246 | 21.7 | 248 | 21.8 | 250 | 22.0 | 252 | 22.1 | 254 | 22.3 | 256 | 22.5 | 258 | **1 146** |
| 21.3 | 244 | 21.5 | 246 | 21.6 | 248 | 21.8 | 250 | 22.0 | 252 | 22.1 | 254 | 22.3 | 256 | 22.4 | 257 | 22.6 | 259 | **1 147** |
| 21.4 | 246 | 21.6 | 248 | 21.8 | 250 | 21.9 | 252 | 22.1 | 253 | 22.2 | 255 | 22.4 | 257 | 22.6 | 259 | 22.7 | 261 | **1 148** |
| 21.6 | 248 | 21.7 | 250 | 21.9 | 252 | 22.1 | 253 | 22.2 | 255 | 22.4 | 257 | 22.5 | 259 | 22.7 | 261 | 22.9 | 263 | **1 149** |
| 21.7 | 249 | 21.9 | 251 | 22.0 | 253 | 22.2 | 255 | 22.3 | 257 | 22.5 | 259 | 22.7 | 261 | 22.8 | 263 | 23.0 | 265 | **1 150** |
| 21.8 | 251 | 22.0 | 253 | 22.2 | 255 | 22.3 | 257 | 22.5 | 259 | 22.6 | 261 | 22.8 | 262 | 23.0 | 264 | 23.1 | 266 | **1 151** |
| 22.0 | 253 | 22.1 | 255 | 22.3 | 257 | 22.4 | 259 | 22.6 | 260 | 22.8 | 262 | 22.9 | 264 | 23.1 | 266 | 23.3 | 268 | **1 152** |
| 22.1 | 255 | 22.2 | 257 | 22.4 | 258 | 22.6 | 260 | 22.7 | 262 | 22.9 | 264 | 23.1 | 266 | 23.2 | 268 | 23.4 | 270 | **1 153** |
| 22.2 | 256 | 22.4 | 258 | 22.5 | 260 | 22.7 | 262 | 22.9 | 264 | 23.0 | 266 | 23.2 | 268 | 23.4 | 270 | 23.5 | 272 | **1 154** |
| 22.4 | 258 | 22.5 | 260 | 22.6 | 262 | 22.8 | 264 | 23.0 | 266 | 23.2 | 267 | 23.3 | 269 | 23.5 | 271 | 23.7 | 273 | **1 155** |
| 22.5 | 260 | 22.6 | 262 | 22.8 | 263 | 23.0 | 265 | 23.1 | 267 | 23.3 | 269 | 23.5 | 271 | 23.6 | 273 | 23.8 | 275 | **1 156** |
| 22.6 | 262 | 22.8 | 263 | 22.9 | 265 | 23.1 | 267 | 23.3 | 269 | 23.4 | 271 | 23.6 | 273 | 23.8 | 275 | 23.9 | 277 | **1 157** |
| 22.7 | 263 | 22.9 | 265 | 23.1 | 267 | 23.2 | 269 | 23.4 | 271 | 23.6 | 273 | 23.7 | 275 | 23.9 | 277 | 24.1 | 278 | **1 158** |
| 22.9 | 265 | 23.0 | 267 | 23.2 | 269 | 23.4 | 271 | 23.5 | 272 | 23.7 | 274 | 23.9 | 277 | 24.0 | 278 | 24.2 | 280 | **1 159** |
| 23.0 | 267 | 23.2 | 269 | 23.3 | 270 | 23.5 | 272 | 25.6 | 274 | 23.8 | 276 | 24.0 | 278 | 24.1 | 280 | 24.3 | 282 | **1 160** |
| 23.1 | 268 | 23.3 | 270 | 23.4 | 272 | 23.6 | 274 | 23.8 | 276 | 23.9 | 278 | 24.1 | 280 | 24.3 | 282 | 24.4 | 284 | **1 161** |
| 23.3 | 270 | 23.4 | 272 | 23.6 | 274 | 23.7 | 276 | 23.9 | 278 | 24.1 | 280 | 24.2 | 282 | 24.4 | 284 | 24.6 | 286 | **1 162** |
| 23.4 | 272 | 23.5 | 274 | 23.7 | 276 | 23.9 | 278 | 24.0 | 280 | 24.2 | 281 | 24.4 | 283 | 24.5 | 285 | 24.7 | 287 | **1 163** |
| 23.5 | 274 | 23.7 | 276 | 23.8 | 277 | 24.0 | 279 | 24.2 | 281 | 24.3 | 283 | 24.5 | 285 | 24.7 | 287 | 24.8 | 289 | **1 164** |
| 23.6 | 275 | 23.8 | 277 | 24.0 | 279 | 24.1 | 281 | 24.3 | 283 | 24.5 | 285 | 24.6 | 287 | 24.8 | 289 | 25.0 | 291 | **1 165** |
| 23.8 | 277 | 25.9 | 279 | 24.1 | 281 | 24.3 | 283 | 24.4 | 285 | 24.6 | 287 | 24.8 | 289 | 24.9 | 291 | 25.1 | 293 | **1 166** |
| 23.9 | 279 | 24.1 | 281 | 24.2 | 283 | 24.4 | 285 | 24.6 | 286 | 24.7 | 288 | 24.9 | 290 | 25.1 | 292 | 25.2 | 294 | **1 167** |
| 24.0 | 281 | 24.2 | 283 | 24.3 | 284 | 24.5 | 286 | 24.7 | 288 | 24.8 | 290 | 25.0 | 292 | 25.2 | 294 | 25.4 | 296 | **1 168** |
| 24.2 | 282 | 24.3 | 284 | 24.5 | 286 | 24.6 | 288 | 24.8 | 290 | 25.0 | 292 | 25.1 | 294 | 25.3 | 296 | 25.5 | 298 | **1 169** |
| 24.3 | 284 | 24.4 | 286 | 24.6 | 288 | 24.8 | 290 | 24.9 | 292 | 25.1 | 294 | 25.3 | 296 | 25.4 | 298 | 25.6 | 300 | **1 170** |
| 24.4 | 286 | 24.6 | 288 | 24.7 | 290 | 24.9 | 292 | 25.1 | 293 | 25.2 | 295 | 25.4 | 297 | 25.6 | 299 | 25.7 | 301 | **1 171** |
| 24.5 | 287 | 24.7 | 289 | 24.9 | 291 | 25.0 | 293 | 25.2 | 295 | 25.4 | 297 | 25.3 | 299 | 25.7 | 301 | 25.9 | 303 | **1 172** |
| 24.7 | 289 | 24.8 | 291 | 25.0 | 293 | 25.2 | 295 | 25.3 | 297 | 25.5 | 299 | 25.7 | 301 | 25.8 | 303 | 26.0 | 305 | **1 173** |
| 24.8 | 291 | 25.0 | 293 | 25.1 | 295 | 25.3 | 297 | 25.4 | 299 | 25.6 | 301 | 25.8 | 303 | 26.0 | 305 | 26.1 | 307 | **1 174** |
| 24.9 | 293 | 25.1 | 295 | 25.2 | 297 | 25.4 | 299 | 25.6 | 300 | 25.7 | 302 | 25.9 | 305 | 26.1 | 307 | 26.3 | 309 | **1 175** |
| 25.0 | 294 | 25.2 | 296 | 25.4 | 298 | 25.5 | 300 | 25.7 | 302 | 25.9 | 304 | 26.1 | 306 | 26.2 | 308 | 26.4 | 310 | **1 176** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ [in °C] (for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 177 | 24.0 | 283 | 24.2 | 285 | 24.4 | 287 | 24.5 | 288 | 24.7 | 290 | 24.8 | 292 | 25.0 | 294 |
| 1 178 | 24.1 | 284 | 24.3 | 286 | 24.5 | 288 | 24.6 | 290 | 24.8 | 292 | 25.0 | 294 | 25.1 | 296 |
| 1 179 | 24.3 | 286 | 24.4 | 288 | 24.6 | 290 | 24.8 | 292 | 24.9 | 294 | 25.1 | 296 | 25.3 | 298 |
| 1 180 | 24.4 | 288 | 24.6 | 290 | 24.7 | 292 | 24.9 | 294 | 25.1 | 296 | 25.2 | 297 | 25.4 | 299 |
| 1 181 | 24.5 | 290 | 24.7 | 292 | 24.9 | 293 | 25.0 | 295 | 25.2 | 297 | 25.3 | 299 | 25.5 | 301 |
| 1 182 | 24.6 | 291 | 24.8 | 293 | 25.0 | 295 | 25.1 | 297 | 25.3 | 299 | 25.5 | 301 | 25.6 | 303 |
| 1 183 | 24.8 | 293 | 24.9 | 295 | 25.1 | 297 | 25.3 | 299 | 25.4 | 301 | 25.6 | 303 | 25.8 | 305 |
| 1 184 | 24.9 | 295 | 25.1 | 297 | 25.2 | 299 | 25.4 | 301 | 25.6 | 303 | 25.7 | 305 | 25.9 | 307 |
| 1 185 | 25.0 | 297 | 25.2 | 298 | 25.4 | 300 | 25.5 | 302 | 25.7 | 304 | 25.8 | 306 | 26.0 | 308 |
| 1 186 | 25.1 | 298 | 25.3 | 300 | 25.5 | 302 | 25.6 | 304 | 25.8 | 306 | 26.0 | 308 | 26.1 | 310 |
| 1 187 | 25.3 | 300 | 25.4 | 302 | 25.6 | 304 | 25.8 | 306 | 25.9 | 308 | 26.1 | 310 | 26.3 | 312 |
| 1 188 | 25.4 | 302 | 25.6 | 304 | 25.7 | 306 | 25.9 | 308 | 26.1 | 310 | 26.2 | 312 | 26.4 | 314 |
| 1 189 | 25.5 | 303 | 25.7 | 305 | 25.9 | 307 | 26.0 | 309 | 26.2 | 311 | 26.4 | 313 | 26.5 | 315 |
| 1 190 | 25.6 | 305 | 25.8 | 307 | 26.0 | 309 | 26.1 | 311 | 26.3 | 313 | 26.5 | 315 | 26.6 | 317 |
| 1 191 | 25.8 | 307 | 25.9 | 309 | 26.1 | 310 | 26.3 | 313 | 26.4 | 315 | 26.6 | 317 | 26.8 | 319 |
| 1 192 | 25.9 | 309 | 26.0 | 311 | 26.2 | 313 | 26.4 | 314 | 26.6 | 317 | 26.7 | 319 | 26.9 | 321 |
| 1 193 | 26.0 | 310 | 26.2 | 312 | 26.3 | 314 | 26.5 | 316 | 26.7 | 318 | 26.9 | 320 | 27.0 | 322 |
| 1 194 | 26.1 | 312 | 26.3 | 314 | 26.5 | 316 | 26.6 | 318 | 26.8 | 320 | 27.0 | 322 | 27.1 | 324 |
| 1 195 | 26.3 | 314 | 26.4 | 316 | 26.6 | 318 | 26.8 | 320 | 26.9 | 322 | 27.1 | 324 | 27.3 | 326 |
| 1 196 | 26.4 | 316 | 26.5 | 317 | 26.7 | 319 | 26.9 | 321 | 27.1 | 324 | 27.2 | 326 | 27.4 | 328 |
| 1 197 | 26.5 | 317 | 26.7 | 319 | 26.8 | 321 | 27.0 | 323 | 27.2 | 325 | 27.3 | 327 | 27.5 | 329 |
| 1 198 | 26.6 | 319 | 26.8 | 321 | 27.0 | 323 | 27.1 | 325 | 27.3 | 327 | 27.5 | 329 | 27.6 | 331 |
| 1 199 | 26.8 | 321 | 26.9 | 323 | 27.1 | 325 | 27.3 | 327 | 27.4 | 329 | 27.6 | 331 | 27.8 | 333 |
| 1 200 | 26.9 | 323 | 27.0 | 324 | 27.2 | 327 | 27.4 | 329 | 27.6 | 331 | 27.8 | 333 | 27.9 | 335 |
| 1 201 | 27.0 | 324 | 27.2 | 326 | 27.3 | 328 | 27.5 | 330 | 27.7 | 332 | 27.8 | 334 | 28.0 | 336 |
| 1 202 | 27.1 | 326 | 27.3 | 328 | 27.5 | 330 | 27.6 | 332 | 27.8 | 334 | 28.0 | 336 | 28.1 | 338 |
| 1 203 | 27.2 | 328 | 27.4 | 330 | 27.6 | 332 | 27.8 | 334 | 27.9 | 336 | 28.1 | 338 | 28.3 | 340 |
| 1 204 | 27.4 | 330 | 27.5 | 332 | 27.7 | 334 | 27.9 | 336 | 28.0 | 338 | 28.2 | 340 | 28.4 | 342 |
| 1 205 | 27.5 | 331 | 27.7 | 333 | 27.8 | 335 | 28.0 | 337 | 28.2 | 339 | 28.3 | 341 | 28.5 | 343 |
| 1 206 | 27.6 | 333 | 27.8 | 335 | 28.0 | 337 | 28.1 | 339 | 28.3 | 341 | 28.5 | 343 | 28.6 | 345 |
| 1 207 | 27.8 | 335 | 27.9 | 337 | 28.1 | 339 | 28.2 | 341 | 28.4 | 343 | 28.6 | 345 | 28.8 | 347 |
| 1 208 | 27.9 | 336 | 28.0 | 338 | 28.2 | 341 | 28.4 | 343 | 28.5 | 345 | 28.7 | 347 | 28.9 | 349 |
| 1 209 | 28.0 | 338 | 28.2 | 340 | 28.3 | 342 | 28.5 | 344 | 28.7 | 346 | 28.8 | 349 | 29.0 | 351 |
| 1 210 | 28.1 | 340 | 28.3 | 342 | 28.4 | 344 | 28.6 | 346 | 28.8 | 348 | 29.0 | 350 | 29.1 | 352 |
| 1 211 | 28.2 | 342 | 28.4 | 344 | 28.6 | 346 | 28.7 | 548 | 28.9 | 350 | 29.1 | 352 | 29.2 | 354 |
| 1 212 | 28.4 | 344 | 28.5 | 346 | 28.7 | 348 | 28.9 | 350 | 29.0 | 352 | 29.2 | 354 | 29.4 | 356 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ [in °C] (for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 25.2 | 296 | 25.3 | 298 | 25.5 | 300 | 25.7 | 302 | 25.8 | 304 | 26.0 | 306 | 26.2 | 308 | 26.3 | 310 | 26.5 | 312 | **1 177** |
| 25.3 | 298 | 25.5 | 300 | 25.6 | 302 | 25.8 | 304 | 26.0 | 306 | 26.1 | 308 | 26.3 | 310 | 26.5 | 312 | 26.6 | 314 | **1 178** |
| 25.4 | 300 | 25.6 | 302 | 25.8 | 304 | 25.9 | 306 | 26.1 | 308 | 26.3 | 309 | 26.4 | 312 | 26.6 | 314 | 26.8 | 316 | **1 179** |
| 25.5 | 301 | 25.7 | 303 | 25.9 | 306 | 26.1 | 307 | 26.2 | 309 | 26.4 | 311 | 26.6 | 313 | 26.7 | 315 | 26.9 | 317 | **1 180** |
| 25.7 | 303 | 25.8 | 305 | 26.0 | 307 | 26.2 | 309 | 26.3 | 311 | 26.5 | 313 | 26.7 | 315 | 26.9 | 317 | 27.0 | 319 | **1 181** |
| 25.8 | 305 | 26.0 | 307 | 26.1 | 309 | 26.3 | 311 | 26.5 | 313 | 26.6 | 315 | 26.8 | 317 | 27.0 | 319 | 27.2 | 321 | **1 182** |
| 25.9 | 307 | 26.1 | 309 | 26.3 | 311 | 26.4 | 313 | 26.6 | 315 | 26.8 | 317 | 26.9 | 319 | 27.1 | 321 | 27.3 | 323 | **1 183** |
| 26.1 | 308 | 26.2 | 310 | 26.4 | 312 | 26.6 | 314 | 26.7 | 316 | 26.9 | 318 | 27.1 | 320 | 27.2 | 323 | 27.4 | 324 | **1 184** |
| 26.2 | 310 | 26.3 | 312 | 26.5 | 314 | 26.7 | 316 | 26.8 | 318 | 27.0 | 320 | 27.2 | 322 | 27.4 | 324 | 27.5 | 326 | **1 185** |
| 26.3 | 312 | 26.5 | 314 | 26.6 | 316 | 26.8 | 318 | 27.0 | 320 | 27.1 | 322 | 27.3 | 324 | 27.5 | 326 | 27.7 | 328 | **1 186** |
| 26.4 | 314 | 26.6 | 316 | 26.8 | 318 | 26.9 | 320 | 27.1 | 322 | 27.3 | 324 | 27.4 | 326 | 27.6 | 328 | 27.8 | 330 | **1 187** |
| 26.6 | 315 | 26.7 | 317 | 26.9 | 320 | 27.1 | 321 | 27.2 | 323 | 27.4 | 326 | 27.6 | 328 | 27.7 | 330 | 27.9 | 332 | **1 188** |
| 26.7 | 317 | 26.9 | 319 | 27.0 | 321 | 27.2 | 323 | 27.4 | 325 | 27.5 | 327 | 27.7 | 329 | 27.9 | 331 | 28.0 | 333 | **1 189** |
| 26.8 | 319 | 27.0 | 321 | 27.1 | 323 | 27.3 | 325 | 27.5 | 327 | 27.7 | 329 | 27.8 | 331 | 28.0 | 333 | 28.2 | 335 | **1 190** |
| 26.9 | 321 | 27.1 | 322 | 27.3 | 325 | 27.4 | 327 | 27.6 | 329 | 27.8 | 331 | 27.9 | 333 | 28.1 | 335 | 28.3 | 337 | **1 191** |
| 27.1 | 322 | 27.2 | 324 | 27.4 | 326 | 27.6 | 329 | 27.7 | 331 | 27.9 | 333 | 28.1 | 335 | 28.2 | 337 | 28.4 | 339 | **1 192** |
| 27.2 | 324 | 27.4 | 326 | 27.5 | 328 | 27.7 | 330 | 27.9 | 332 | 28.0 | 334 | 28.2 | 336 | 28.4 | 338 | 28.5 | 340 | **1 193** |
| 27.3 | 326 | 27.5 | 328 | 27.6 | 330 | 27.8 | 332 | 28.0 | 334 | 28.2 | 336 | 28.3 | 338 | 28.5 | 340 | 28.7 | 342 | **1 194** |
| 27.4 | 328 | 27.6 | 330 | 27.8 | 332 | 27.9 | 334 | 28.1 | 336 | 28.3 | 338 | 28.4 | 340 | 28.6 | 342 | 28.8 | 344 | **1 195** |
| 27.5 | 329 | 27.7 | 332 | 27.9 | 334 | 28.1 | 336 | 28.2 | 338 | 28.4 | 340 | 28.6 | 342 | 28.7 | 344 | 28.9 | 346 | **1 196** |
| 27.7 | 331 | 27.9 | 333 | 28.0 | 335 | 28.2 | 337 | 28.4 | 339 | 28.5 | 342 | 28.7 | 344 | 28.9 | 346 | 29.1 | 348 | **1 197** |
| 27.8 | 333 | 28.0 | 335 | 28.1 | 337 | 28.3 | 339 | 28.5 | 341 | 28.7 | 343 | 28.8 | 345 | 29.0 | 347 | 29.2 | 350 | **1 198** |
| 27.9 | 335 | 28.1 | 337 | 28.3 | 339 | 28.4 | 341 | 28.6 | 344 | 28.8 | 345 | 29.0 | 347 | 29.1 | 349 | 29.3 | 351 | **1 199** |
| 28.0 | 337 | 28.2 | 339 | 28.4 | 341 | 28.6 | 343 | 28.7 | 345 | 28.9 | 347 | 29.1 | 349 | 29.2 | 351 | 29.4 | 353 | **1 200** |
| 28.2 | 338 | 28.4 | 340 | 28.5 | 342 | 28.7 | 345 | 28.9 | 347 | 29.0 | 349 | 29.2 | 351 | 29.4 | 353 | 29.6 | 355 | **1 201** |
| 28.3 | 340 | 28.5 | 342 | 28.6 | 344 | 28.8 | 346 | 29.0 | 348 | 29.2 | 351 | 29.3 | 353 | 29.5 | 355 | 29.7 | 357 | **1 202** |
| 28.4 | 342 | 28.6 | 344 | 28.8 | 346 | 28.9 | 348 | 29.1 | 350 | 29.3 | 352 | 29.5 | 354 | 29.6 | 356 | 29.8 | 358 | **1 203** |
| 28.6 | 344 | 28.7 | 346 | 28.9 | 348 | 29.1 | 350 | 29.2 | 352 | 29.4 | 354 | 29.6 | 356 | 29.8 | 358 | 29.9 | 360 | **1 204** |
| 28.7 | 345 | 28.9 | 348 | 29.0 | 350 | 29.2 | 352 | 29.4 | 354 | 29.5 | 356 | 29.7 | 358 | 29.9 | 360 | 30.1 | 362 | **1 205** |
| 28.8 | 347 | 29.0 | 349 | 29.1 | 351 | 29.3 | 353 | 29.5 | 356 | 29.7 | 358 | 29.7 | 358 | 30.0 | 362 | 30.2 | 364 | **1 206** |
| 28.9 | 349 | 29.1 | 351 | 29.3 | 353 | 29.4 | 355 | 29.6 | 357 | 29.8 | 359 | 30.0 | 361 | 30.1 | 364 | 30.3 | 366 | **1 207** |
| 29.1 | 351 | 29.2 | 353 | 29.4 | 355 | 29.6 | 357 | 29.7 | 359 | 29.9 | 361 | 30.1 | 363 | 30.3 | 365 | 30.4 | 367 | **1 208** |
| 29.2 | 353 | 29.3 | 355 | 29.5 | 357 | 29.7 | 359 | 29.9 | 361 | 30.0 | 363 | 30.2 | 365 | 30.4 | 367 | 30.6 | 369 | **1 209** |
| 29.3 | 355 | 29.5 | 357 | 29.6 | 359 | 29.8 | 361 | 30.0 | 363 | 30.2 | 365 | 30.3 | 367 | 30.5 | 369 | 30.7 | 371 | **1 210** |
| 29.4 | 356 | 29.6 | 358 | 29.8 | 360 | 29.9 | 363 | 30.1 | 365 | 30.3 | 367 | 30.4 | 369 | 30.6 | 371 | 30.8 | 373 | **1 211** |
| 29.5 | 358 | 29.7 | 360 | 29.9 | 362 | 30.1 | 364 | 30.2 | 366 | 30.4 | 368 | 30.6 | 371 | 30.8 | 373 | 30.9 | 375 | **1 212** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 213 | 28.5 | 345 | 28.6 | 348 | 28.8 | 349 | 29.0 | 352 | 29.1 | 354 | 29.3 | 356 | 29.5 | 358 |
| 1 214 | 28.6 | 347 | 28.8 | 349 | 28.9 | 351 | 29.1 | 353 | 29.3 | 355 | 29.4 | 358 | 29.6 | 360 |
| 1 215 | 28.7 | 349 | 28.9 | 351 | 29.1 | 353 | 29.2 | 355 | 29.4 | 357 | 29.6 | 359 | 29.7 | 361 |
| 1 216 | 28.8 | 351 | 29.0 | 353 | 29.2 | 355 | 29.4 | 357 | 29.5 | 359 | 29.7 | 361 | 29.9 | 363 |
| 1 217 | 29.0 | 352 | 29.1 | 355 | 29.3 | 357 | 29.5 | 359 | 29.6 | 361 | 29.8 | 363 | 30.0 | 365 |
| 1 218 | 29.1 | 354 | 29.3 | 556 | 29.4 | 358 | 29.6 | 361 | 29.8 | 362 | 29.9 | 365 | 30.1 | 367 |
| 1 219 | 29.2 | 356 | 29.4 | 358 | 29.6 | 360 | 29.7 | 362 | 29.9 | 364 | 30.1 | 366 | 30.2 | 369 |
| 1 220 | 29.3 | 358 | 29.5 | 360 | 29.7 | 362 | 29.8 | 364 | 30.0 | 366 | 30.2 | 368 | 30.4 | 370 |
| 1 221 | 29.5 | 360 | 29.6 | 362 | 29.8 | 364 | 30.0 | 366 | 30.1 | 368 | 30.3 | 370 | 30.5 | 372 |
| 1 222 | 29.6 | 361 | 29.7 | 363 | 29.9 | 366 | 30.1 | 368 | 30.3 | 370 | 30.4 | 372 | 30.6 | 374 |
| 1 223 | 29.7 | 363 | 29.9 | 365 | 30.0 | 367 | 30.2 | 369 | 30.4 | 372 | 30.6 | 374 | 30.7 | 376 |
| 1 224 | 29.8 | 365 | 30.0 | 367 | 30.2 | 369 | 30.3 | 371 | 30.5 | 373 | 30.7 | 375 | 30.8 | 377 |
| 1 225 | 29.9 | 361 | 30.1 | 369 | 30.3 | 371 | 30.5 | 373 | 30.6 | 375 | 30.8 | 377 | 31.0 | 379 |
| 1 226 | 30.1 | 369 | 30.2 | 371 | 30.4 | 373 | 30.6 | 375 | 30.7 | 377 | 30.9 | 379 | 31.1 | 381 |
| 1 227 | 30.2 | 370 | 30.4 | 372 | 30.5 | 374 | 30.7 | 377 | 30.9 | 379 | 31.0 | 381 | 31.2 | 383 |
| 1 228 | 30.3 | 372 | 30.5 | 374 | 30.7 | 376 | 30.8 | 378 | 31.0 | 381 | 31.2 | 383 | 31.3 | 385 |
| 1 229 | 30.4 | 374 | 30.6 | 376 | 30.8 | 378 | 30.9 | 380 | 31.1 | 382 | 31.3 | 384 | 31.5 | 387 |
| 1 230 | 30.5 | 376 | 30.7 | 378 | 30.9 | 380 | 31.1 | 382 | 31.2 | 384 | 31.4 | 386 | 31.6 | 388 |
| 1 231 | 30.7 | 377 | 30.8 | 380 | 31.0 | 382 | 31.2 | 384 | 31.4 | 386 | 31.5 | 388 | 31.7 | 390 |
| 1 232 | 30.8 | 379 | 31.0 | 381 | 31.1 | 384 | 31.3 | 386 | 31.5 | 388 | 31.7 | 390 | 31.8 | 392 |
| 1 233 | 30.9 | 381 | 31.1 | 383 | 31.3 | 385 | 31.4 | 387 | 31.6 | 390 | 31.8 | 392 | 31.9 | 394 |
| 1 234 | 31.0 | 383 | 31.2 | 385 | 31.4 | 387 | 31.5 | 389 | 31.7 | 391 | 31.9 | 394 | 32.1 | 396 |
| 1 235 | 31.1 | 385 | 31.3 | 387 | 31.5 | 389 | 31.7 | 391 | 31.8 | 393 | 32.0 | 395 | 32.2 | 397 |
| 1 236 | 31.3 | 386 | 31.4 | 388 | 31.6 | 391 | 31.8 | 393 | 32.0 | 395 | 32.1 | 397 | 32.3 | 399 |
| 1 237 | 31.4 | 388 | 31.6 | 390 | 31.7 | 393 | 31.9 | 395 | 32.1 | 397 | 32.3 | 399 | 32.4 | 401 |
| 1 238 | 31.5 | 390 | 31.7 | 392 | 31.9 | 394 | 32.0 | 396 | 32.2 | 399 | 32.4 | 401 | 32.5 | 403 |
| 1 239 | 31.6 | 392 | 31.8 | 394 | 32.0 | 396 | 32.1 | 398 | 32.3 | 400 | 32.5 | 403 | 32.7 | 405 |
| 1 240 | 31.7 | 394 | 31.9 | 396 | 32.1 | 398 | 32.3 | 400 | 32.4 | 402 | 32.6 | 404 | 32.8 | 406 |
| 1 241 | 31.9 | 396 | 32.0 | 398 | 32.2 | 400 | 32.4 | 402 | 32.6 | 404 | 32.7 | 406 | 32.9 | 408 |
| 1 242 | 32.0 | 397 | 32.2 | 399 | 32.3 | 402 | 32.5 | 404 | 32.7 | 406 | 32.9 | 408 | 33.0 | 410 |
| 1 243 | 32.1 | 399 | 32.3 | 401 | 32.5 | 403 | 32.6 | 406 | 32.8 | 408 | 33.0 | 410 | 33.1 | 412 |
| 1 244 | 32.2 | 401 | 32.4 | 403 | 32.6 | 405 | 32.8 | 407 | 32.9 | 410 | 33.1 | 412 | 33.3 | 414 |
| 1 245 | 32.4 | 403 | 32.5 | 405 | 32.7 | 407 | 32.9 | 409 | 33.0 | 411 | 33.2 | 414 | 33.4 | 416 |
| 1 246 | 32.5 | 404 | 32.6 | 406 | 32.8 | 409 | 33.0 | 411 | 33.2 | 413 | 33.3 | 415 | 33.5 | 417 |
| 1 247 | 32.6 | 406 | 32.8 | 409 | 32.9 | 411 | 33.1 | 413 | 33.3 | 415 | 33.4 | 417 | 33.6 | 419 |
| 1 248 | 32.7 | 408 | 32.9 | 410 | 33.1 | 413 | 33.2 | 415 | 33.4 | 417 | 33.6 | 419 | 33.8 | 421 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 29.7 | 360 | 29.8 | 362 | 30.0 | 364 | 30.2 | 366 | 30.4 | 368 | 30.5 | 370 | 30.7 | 372 | 30.9 | 375 | 31.0 | 377 | **1 213** |
| 29.8 | 362 | 30.0 | 364 | 30.1 | 366 | 30.3 | 368 | 30.5 | 370 | 30.6 | 372 | 30.8 | 374 | 31.0 | 376 | 31.2 | 378 | **1 214** |
| 29.9 | 363 | 30.1 | 365 | 30.3 | 368 | 30.4 | 370 | 30.6 | 372 | 30.8 | 374 | 31.0 | 376 | 31.1 | 378 | 31.3 | 380 | **1 215** |
| 30.0 | 365 | 30.2 | 367 | 30.4 | 369 | 30.6 | 371 | 30.7 | 374 | 30.9 | 376 | 31.1 | 378 | 31.2 | 380 | 31.4 | 382 | **1 216** |
| 30.2 | 367 | 30.3 | 369 | 30.5 | 371 | 30.7 | 373 | 30.9 | 375 | 31.0 | 378 | 31.2 | 380 | 31.4 | 382 | 31.5 | 384 | **1 217** |
| 30.3 | 369 | 30.5 | 371 | 30.6 | 373 | 30.8 | 375 | 31.0 | 377 | 31.1 | 379 | 31.3 | 381 | 31.5 | 384 | 31.7 | 386 | **1 218** |
| 30.4 | 371 | 30.6 | 373 | 30.8 | 375 | 30.9 | 377 | 31.1 | 379 | 31.3 | 381 | 31.4 | 383 | 31.6 | 385 | 31.8 | 388 | **1 219** |
| 30.5 | 372 | 30.7 | 375 | 30.9 | 377 | 31.0 | 379 | 31.2 | 381 | 31.4 | 383 | 31.6 | 385 | 31.7 | 387 | 31.9 | 389 | **1 220** |
| 30.7 | 374 | 30.8 | 376 | 31.0 | 379 | 31.2 | 381 | 31.3 | 383 | 31.5 | 385 | 31.7 | 387 | 31.9 | 389 | 32.0 | 391 | **1 221** |
| 30.8 | 376 | 30.9 | 378 | 31.1 | 380 | 31.3 | 382 | 31.5 | 384 | 31.6 | 387 | 31.8 | 389 | 32.0 | 391 | 32.2 | 393 | **1 222** |
| 30.9 | 378 | 31.1 | 380 | 31.2 | 382 | 31.4 | 385 | 31.6 | 386 | 31.8 | 388 | 31.9 | 391 | 32.1 | 393 | 32.3 | 395 | **1 223** |
| 31.0 | 380 | 31.2 | 382 | 31.4 | 384 | 31.5 | 386 | 31.7 | 388 | 31.9 | 390 | 32.1 | 392 | 32.2 | 394 | 32.4 | 397 | **1 224** |
| 31.1 | 381 | 31.3 | 383 | 31.5 | 386 | 31.7 | 388 | 31.8 | 390 | 32.0 | 392 | 32.2 | 394 | 32.4 | 396 | 32.5 | 398 | **1 225** |
| 31.3 | 383 | 31.4 | 385 | 31.6 | 388 | 31.8 | 390 | 32.0 | 392 | 32.1 | 394 | 32.3 | 396 | 32.5 | 398 | 32.6 | 400 | **1 226** |
| 31.4 | 385 | 31.5 | 387 | 31.7 | 389 | 31.9 | 391 | 32.1 | 393 | 32.2 | 396 | 32.4 | 398 | 32.6 | 400 | 32.8 | 402 | **1 227** |
| 31.5 | 387 | 31.7 | 389 | 31.9 | 391 | 32.0 | 393 | 32.2 | 395 | 32.4 | 397 | 32.5 | 400 | 32.7 | 402 | 32.9 | 404 | **1 228** |
| 31.6 | 389 | 31.8 | 391 | 32.0 | 393 | 32.1 | 395 | 32.3 | 397 | 32.5 | 399 | 32.7 | 402 | 32.8 | 404 | 33.0 | 406 | **1 229** |
| 31.7 | 390 | 31.9 | 392 | 32.1 | 395 | 32.3 | 396 | 32.4 | 399 | 32.6 | 401 | 32.8 | 403 | 33.0 | 405 | 33.1 | 407 | **1 230** |
| 31.9 | 392 | 32.0 | 394 | 32.2 | 397 | 32.4 | 399 | 32.6 | 401 | 32.7 | 403 | 32.9 | 405 | 33.1 | 407 | 33.3 | 409 | **1 231** |
| 32.0 | 394 | 32.2 | 396 | 32.3 | 398 | 32.5 | 401 | 32.7 | 403 | 32.9 | 405 | 33.0 | 407 | 33.2 | 409 | 33.4 | 411 | **1 232** |
| 32.1 | 396 | 32.3 | 398 | 32.5 | 400 | 32.6 | 402 | 32.8 | 404 | 33.0 | 407 | 33.1 | 409 | 33.3 | 411 | 33.5 | 413 | **1 233** |
| 32.2 | 398 | 32.4 | 400 | 32.6 | 402 | 32.8 | 404 | 32.9 | 406 | 33.1 | 408 | 33.3 | 411 | 33.4 | 413 | 33.6 | 415 | **1 234** |
| 32.4 | 400 | 32.5 | 402 | 32.7 | 404 | 32.9 | 406 | 33.0 | 408 | 33.2 | 410 | 33.4 | 412 | 33.6 | 415 | 33.7 | 417 | **1 235** |
| 32.5 | 401 | 32.6 | 404 | 32.8 | 406 | 33.0 | 408 | 33.2 | 410 | 33.3 | 412 | 33.5 | 414 | 33.7 | 416 | 33.9 | 419 | **1 236** |
| 32.6 | 403 | 32.8 | 405 | 32.9 | 407 | 33.1 | 410 | 33.3 | 412 | 33.5 | 414 | 33.6 | 416 | 33.8 | 418 | 34.0 | 420 | **1 237** |
| 32.7 | 405 | 32.9 | 407 | 33.1 | 409 | 33.2 | 412 | 33.4 | 414 | 33.6 | 416 | 33.8 | 418 | 33.9 | 420 | 34.1 | 422 | **1 238** |
| 32.8 | 407 | 33.0 | 409 | 33.2 | 411 | 33.4 | 413 | 33.5 | 415 | 33.7 | 418 | 33.9 | 420 | 34.0 | 422 | 34.2 | 424 | **1 239** |
| 33.0 | 409 | 33.1 | 411 | 33.3 | 413 | 33.5 | 415 | 33.7 | 417 | 33.8 | 419 | 34.0 | 422 | 34.2 | 424 | 34.3 | 426 | **1 240** |
| 33.1 | 411 | 33.3 | 413 | 33.4 | 415 | 33.6 | 417 | 33.8 | 419 | 34.0 | 421 | 34.1 | 423 | 34.3 | 426 | 34.5 | 428 | **1 241** |
| 33.2 | 412 | 33.4 | 414 | 33.6 | 417 | 33.7 | 419 | 33.9 | 421 | 34.1 | 423 | 34.2 | 425 | 34.4 | 427 | 34.6 | 430 | **1 242** |
| 33.3 | 414 | 33.5 | 416 | 33.7 | 419 | 33.8 | 421 | 34.0 | 423 | 34.2 | 425 | 34.4 | 427 | 34.5 | 429 | 34.7 | 431 | **1 243** |
| 33.4 | 416 | 33.6 | 418 | 33.8 | 420 | 34.0 | 422 | 34.1 | 425 | 34.3 | 427 | 34.5 | 429 | 34.6 | 431 | 34.8 | 433 | **1 244** |
| 33.6 | 418 | 33.7 | 420 | 33.9 | 422 | 34.1 | 424 | 34.3 | 427 | 34.4 | 429 | 34.6 | 431 | 34.8 | 433 | 35.0 | 435 | **1 245** |
| 33.1 | 419 | 33.9 | 421 | 34.0 | 424 | 34.2 | 426 | 34.4 | 428 | 34.6 | 430 | 34.7 | 432 | 34.9 | 435 | 35.1 | 437 | **1 246** |
| 33.8 | 422 | 34.0 | 424 | 34.2 | 426 | 34.3 | 428 | 34.5 | 430 | 34.7 | 432 | 34.8 | 434 | 35.0 | 437 | 35.2 | 439 | **1 247** |
| 33.9 | 423 | 34.1 | 426 | 34.3 | 428 | 34.4 | 430 | 34.6 | 432 | 34.8 | 434 | 35.0 | 436 | 35.1 | 439 | 35.3 | 441 | **1 248** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 249 | 32.8 | 410 | 33.0 | 412 | 33.2 | 414 | 33.3 | 416 | 33.5 | 419 | 33.7 | 421 | 33.9 | 423 |
| 1 250 | 33.0 | 412 | 33.1 | 414 | 33.3 | 416 | 33.5 | 418 | 33.6 | 421 | 33.8 | 423 | 34.0 | 425 |
| 1 251 | 33.1 | 414 | 33.2 | 416 | 33.4 | 418 | 33.6 | 420 | 33.8 | 422 | 33.9 | 425 | 34.1 | 427 |
| 1 252 | 33.2 | 416 | 33.4 | 418 | 33.5 | 420 | 33.7 | 422 | 33.9 | 424 | 34.1 | 426 | 34.2 | 429 |
| 1 253 | 33.3 | 417 | 33.5 | 420 | 33.6 | 422 | 33.8 | 424 | 34.0 | 426 | 34.2 | 428 | 34.4 | 430 |
| 1 254 | 33.4 | 419 | 33.6 | 421 | 33.8 | 423 | 33.9 | 426 | 34.1 | 428 | 34.3 | 430 | 34.5 | 432 |
| 1 255 | 33.5 | 421 | 33.7 | 423 | 33.9 | 425 | 34.1 | 427 | 34.2 | 430 | 34.4 | 432 | 34.6 | 434 |
| 1 256 | 33.7 | 423 | 33.8 | 425 | 34.0 | 427 | 34.2 | 429 | 34.4 | 432 | 34.5 | 434 | 34.7 | 436 |
| 1 257 | 33.8 | 424 | 34.0 | 427 | 34.1 | 429 | 34.3 | 431 | 34.5 | 433 | 34.6 | 436 | 34.8 | 438 |
| 1 258 | 33.9 | 426 | 34.1 | 429 | 34.2 | 431 | 34.4 | 433 | 34.6 | 435 | 34.8 | 437 | 34.9 | 439 |
| 1 259 | 34.0 | 428 | 34.2 | 431 | 34.4 | 433 | 34.5 | 435 | 34.7 | 437 | 34.9 | 439 | 35.1 | 441 |
| 1 260 | 34.1 | 430 | 34.3 | 433 | 34.5 | 434 | 34.7 | 437 | 34.8 | 439 | 35.0 | 441 | 35.2 | 443 |
| 1 261 | 34.3 | 432 | 34.4 | 434 | 34.6 | 436 | 34.8 | 438 | 35.0 | 441 | 35.1 | 443 | 35.3 | 445 |
| 1 262 | 34.4 | 434 | 34.6 | 436 | 34.7 | 438 | 34.9 | 440 | 35.1 | 443 | 35.2 | 445 | 35.4 | 447 |
| 1 263 | 34.5 | 436 | 34.7 | 438 | 34.8 | 440 | 35.0 | 442 | 35.2 | 444 | 35.4 | 447 | 35.5 | 449 |
| 1 264 | 34.6 | 438 | 34.8 | 440 | 35.0 | 442 | 35.1 | 444 | 35.3 | 446 | 35.5 | 448 | 35.7 | 451 |
| 1 265 | 34.7 | 439 | 34.9 | 441 | 35.1 | 444 | 35.3 | 446 | 35.4 | 448 | 35.6 | 450 | 35.8 | 452 |
| 1 266 | 34.9 | 441 | 35.0 | 443 | 35.2 | 446 | 35.4 | 448 | 35.6 | 450 | 35.7 | 452 | 35.9 | 454 |
| 1 267 | 35.0 | 443 | 35.1 | 445 | 35.3 | 448 | 35.5 | 450 | 35.7 | 452 | 35.8 | 454 | 36.0 | 456 |
| 1 268 | 35.1 | 445 | 35.3 | 447 | 35.4 | 449 | 35.6 | 452 | 35.8 | 454 | 36.0 | 456 | 36.1 | 458 |
| 1 269 | 35.2 | 447 | 35.4 | 449 | 35.6 | 451 | 35.7 | 453 | 35.9 | 456 | 36.1 | 458 | 36.2 | 460 |
| 1 270 | 35.3 | 449 | 35.5 | 451 | 35.7 | 453 | 35.8 | 455 | 36.0 | 457 | 36.2 | 460 | 36.4 | 462 |
| 1 271 | 35.4 | 451 | 35.6 | 453 | 35.8 | 455 | 36.0 | 457 | 36.1 | 459 | 36.3 | 462 | 36.5 | 464 |
| 1 272 | 35.6 | 452 | 35.7 | 455 | 35.9 | 457 | 36.1 | 459 | 36.3 | 461 | 36.4 | 463 | 36.6 | 466 |
| 1 273 | 35.7 | 454 | 35.9 | 456 | 36.0 | 459 | 36.2 | 461 | 36.4 | 463 | 36.5 | 465 | 36.7 | 467 |
| 1 274 | 35.8 | 456 | 36.0 | 458 | 36.1 | 460 | 36.3 | 463 | 36.5 | 465 | 36.6 | 467 | 36.8 | 469 |
| 1 275 | 35.9 | 458 | 36.1 | 460 | 36.3 | 462 | 36.4 | 464 | 36.6 | 467 | 36.8 | 469 | 37.0 | 471 |
| 1 276 | 36.0 | 460 | 36.2 | 462 | 36.4 | 464 | 36.6 | 466 | 36.7 | 469 | 36.9 | 471 | 37.1 | 473 |
| 1 277 | 36.2 | 462 | 36.3 | 464 | 36.5 | 466 | 36.7 | 468 | 36.8 | 470 | 37.0 | 473 | 37.2 | 475 |
| 1 278 | 36.3 | 464 | 36.4 | 466 | 36.6 | 468 | 36.8 | 470 | 37.0 | 472 | 37.1 | 475 | 37.3 | 477 |
| 1 279 | 36.4 | 465 | 36.6 | 468 | 36.7 | 470 | 36.9 | 472 | 37.1 | 474 | 37.2 | 476 | 37.4 | 479 |
| 1 280 | 36.5 | 467 | 36.7 | 469 | 36.8 | 472 | 37.0 | 474 | 37.2 | 476 | 37.4 | 478 | 37.5 | 480 |
| 1 281 | 36.6 | 469 | 36.8 | 471 | 37.0 | 473 | 37.1 | 476 | 37.3 | 478 | 37.5 | 480 | 37.7 | 482 |
| 1 282 | 36.7 | 471 | 36.9 | 473 | 37.1 | 475 | 37.3 | 478 | 37.4 | 480 | 37.6 | 482 | 37.8 | 484 |
| 1 283 | 36.8 | 473 | 37.0 | 475 | 37.2 | 477 | 37.4 | 479 | 37.5 | 482 | 37.7 | 484 | 37.9 | 486 |
| 1 284 | 37.0 | 475 | 37.1 | 477 | 37.3 | 479 | 37.5 | 481 | 37.7 | 484 | 37.8 | 486 | 38.0 | 488 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 34.1 | 425 | 34.2 | 427 | 34.4 | 430 | 34.6 | 432 | 34.7 | 434 | 34.9 | 436 | 35.1 | 438 | 35.3 | 440 | 35.4 | 443 | **1 249** |
| 34.2 | 427 | 34.3 | 429 | 34.5 | 431 | 34.7 | 434 | 34.9 | 436 | 35.0 | 438 | 35.2 | 440 | 35.4 | 442 | 35.5 | 444 | **1 250** |
| 34.3 | 429 | 34.5 | 431 | 34.6 | 433 | 34.8 | 436 | 35.0 | 438 | 35.2 | 440 | 35.3 | 442 | 35.5 | 444 | 35.7 | 446 | **1 251** |
| 34.4 | 431 | 34.6 | 433 | 34.8 | 435 | 34.9 | 437 | 35.1 | 439 | 35.3 | 442 | 35.4 | 444 | 35.6 | 446 | 35.8 | 448 | **1 252** |
| 34.5 | 433 | 34.7 | 435 | 34.9 | 437 | 35.0 | 439 | 35.2 | 441 | 35.4 | 443 | 35.6 | 446 | 35.7 | 448 | 35.9 | 450 | **1 253** |
| 34.6 | 434 | 34.8 | 437 | 35.0 | 439 | 35.2 | 441 | 35.3 | 443 | 35.5 | 445 | 35.7 | 447 | 35.9 | 450 | 36.0 | 452 | **1 254** |
| 34.8 | 436 | 34.9 | 438 | 35.1 | 441 | 35.3 | 443 | 35.5 | 445 | 35.6 | 447 | 35.8 | 449 | 36.0 | 452 | 36.1 | 454 | **1 255** |
| 34.9 | 438 | 35.1 | 440 | 35.2 | 442 | 35.4 | 445 | 35.6 | 447 | 35.8 | 449 | 35.9 | 451 | 36.1 | 453 | 36.3 | 455 | **1 256** |
| 35.0 | 440 | 35.2 | 442 | 35.3 | 444 | 35.5 | 446 | 35.7 | 449 | 35.9 | 451 | 36.0 | 453 | 36.2 | 455 | 36.4 | 457 | **1 267** |
| 35.1 | 442 | 35.3 | 444 | 35.5 | 446 | 35.6 | 448 | 35.8 | 450 | 36.0 | 453 | 36.2 | 455 | 36.3 | 457 | 36.5 | 459 | **1 268** |
| 35.2 | 444 | 35.4 | 446 | 35.6 | 448 | 35.8 | 450 | 35.9 | 452 | 36.1 | 455 | 36.3 | 457 | 36.5 | 459 | 36.6 | 461 | **1 269** |
| 35.4 | 446 | 35.5 | 448 | 35.7 | 450 | 35.9 | 452 | 36.0 | 454 | 36.2 | 456 | 36.4 | 459 | 36.6 | 462 | 36.7 | 463 | **1 260** |
| 35.5 | 447 | 35.6 | 450 | 35.8 | 452 | 36.0 | 454 | 36.2 | 456 | 36.3 | 458 | 36.5 | 460 | 36.7 | 463 | 36.9 | 465 | **1 261** |
| 35.6 | 449 | 35.8 | 451 | 35.9 | 453 | 36.1 | 456 | 36.3 | 457 | 36.5 | 460 | 36.6 | 462 | 36.8 | 465 | 37.0 | 467 | **1 262** |
| 35.7 | 451 | 35.9 | 453 | 36.1 | 455 | 36.2 | 458 | 36.4 | 460 | 36.6 | 462 | 36.7 | 464 | 36.9 | 466 | 37.1 | 468 | **1 263** |
| 35.8 | 453 | 36.0 | 455 | 36.2 | 457 | 36.4 | 459 | 36.5 | 462 | 36.7 | 464 | 36.9 | 466 | 37.0 | 468 | 37.2 | 470 | **1 264** |
| 36.0 | 455 | 36.1 | 457 | 36.3 | 459 | 36.5 | 461 | 36.6 | 463 | 36.8 | 466 | 37.0 | 468 | 37.2 | 470 | 37.3 | 472 | **1 265** |
| 36.1 | 457 | 36.2 | 459 | 36.4 | 461 | 36.6 | 463 | 56.8 | 465 | 36.9 | 468 | 37.1 | 470 | 37.3 | 472 | 37.4 | 474 | **1 266** |
| 36.2 | 459 | 36.4 | 461 | 36.5 | 463 | 36.7 | 465 | 36.9 | 467 | 37.1 | 470 | 37.2 | 472 | 37.4 | 474 | 37.6 | 476 | **1 267** |
| 36.3 | 460 | 36.5 | 462 | 36.6 | 465 | 36.8 | 467 | 37.0 | 469 | 37.2 | 471 | 37.3 | 473 | 37.5 | 476 | 37.7 | 478 | **1 298** |
| 36.4 | 462 | 36.6 | 464 | 36.8 | 466 | 36.9 | 469 | 37.1 | 471 | 37.3 | 473 | 37.5 | 475 | 37.6 | 478 | 37.8 | 480 | **1 269** |
| 36.5 | 464 | 36.7 | 466 | 36.9 | 468 | 37.1 | 470 | 37.2 | 473 | 37.4 | 475 | 37.6 | 477 | 37.7 | 479 | 37.9 | 482 | **1 270** |
| 36.7 | 466 | 36.8 | 468 | 37.0 | 470 | 37.2 | 472 | 37.3 | 475 | 37.5 | 477 | 37.7 | 479 | 37.9 | 481 | 38.0 | 483 | **1 271** |
| 36.8 | 468 | 36.9 | 470 | 37.1 | 472 | 37.3 | 474 | 37.5 | 476 | 37.6 | 479 | 37.8 | 481 | 38.0 | 483 | 38.1 | 485 | **1 272** |
| 36.9 | 470 | 37.1 | 472 | 37.2 | 474 | 37.4 | 476 | 37.6 | 478 | 37.8 | 481 | 37.9 | 483 | 38.1 | 485 | 38.3 | 487 | **1 273** |
| 37.0 | 472 | 37.2 | 474 | 37.4 | 476 | 37.5 | 478 | 37.7 | 480 | 37.9 | 482 | 38.0 | 485 | 38.2 | 487 | 38.4 | 489 | **1 274** |
| 37.1 | 473 | 37.3 | 475 | 37.5 | 478 | 37.6 | 480 | 37.8 | 482 | 38.0 | 484 | 38.2 | 487 | 38.3 | 489 | 38.5 | 491 | **1 275** |
| 37.2 | 475 | 37.4 | 477 | 37.6 | 480 | 37.8 | 482 | 37.9 | 484 | 38.1 | 486 | 38.3 | 488 | 38.4 | 490 | 38.6 | 493 | **1 276** |
| 37.4 | 477 | 37.5 | 479 | 37.7 | 481 | 37.9 | 484 | 38.0 | 486 | 38.2 | 488 | 38.4 | 490 | 38.6 | 492 | 38.7 | 495 | **1 277** |
| 37.5 | 479 | 37.6 | 481 | 37.8 | 483 | 38.0 | 486 | 38.2 | 488 | 38.3 | 490 | 38.5 | 492 | 38.7 | 494 | 38.8 | 497 | **1 278** |
| 37.5 | 481 | 37.7 | 483 | 37.9 | 485 | 38.1 | 488 | 38.3 | 490 | 38.5 | 492 | 38.6 | 494 | 38.8 | 496 | 39.0 | 498 | **1 279** |
| 37.7 | 483 | 37.9 | 485 | 38.1 | 487 | 38.2 | 489 | 38.4 | 492 | 38.6 | 494 | 38.7 | 496 | 38.9 | 498 | 39.1 | 500 | **1 280** |
| 37.8 | 484 | 38.0 | 487 | 38.2 | 489 | 38.3 | 491 | 38.5 | 493 | 38.7 | 496 | 38.9 | 498 | 38.0 | 500 | 39.2 | 502 | **1 281** |
| 37.9 | 486 | 38.1 | 489 | 38.3 | 491 | 38.5 | 493 | 38.6 | 495 | 38.8 | 497 | 39.0 | 500 | 39.1 | 502 | 39.3 | 504 | **1 282** |
| 38.1 | 488 | 38.2 | 490 | 38.4 | 493 | 38.6 | 495 | 38.7 | 497 | 38.9 | 499 | 39.0 | 502 | 39.3 | 504 | 39.4 | 506 | **1 283** |
| 38.2 | 490 | 38.3 | 492 | 38.5 | 495 | 38.7 | 497 | 37.9 | 499 | 39.0 | 501 | 39.2 | 503 | 39.4 | 506 | 39.5 | 508 | **1 284** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 285 | 37.1 | 476 | 37.3 | 479 | 37.4 | 481 | 37.6 | 483 | 37.8 | 485 | 37.9 | 488 | 38.1 | 490 |
| 1 286 | 37.2 | 478 | 37.4 | 481 | 37.5 | 483 | 37.7 | 485 | 37.9 | 487 | 38.1 | 489 | 38.2 | 492 |
| 1 287 | 37.3 | 480 | 37.5 | 482 | 37.6 | 485 | 37.8 | 487 | 38.0 | 489 | 38.2 | 491 | 38.3 | 494 |
| 1 288 | 37.4 | 482 | 37.6 | 484 | 37.8 | 487 | 38.0 | 489 | 38.1 | 491 | 38.3 | 493 | 38.5 | 495 |
| 1 289 | 37.5 | 484 | 37.7 | 486 | 37.9 | 488 | 38.1 | 491 | 38.2 | 493 | 38.4 | 495 | 38.6 | 494 |
| 1 290 | 37.7 | 486 | 37.8 | 488 | 38.0 | 490 | 38.2 | 493 | 38.4 | 495 | 38.5 | 497 | 38.7 | 499 |
| 1 291 | 37.8 | 488 | 38.0 | 490 | 38.1 | 492 | 38.3 | 494 | 38.5 | 497 | 38.6 | 499 | 38.8 | 501 |
| 1 292 | 37.9 | 490 | 38.1 | 492 | 38.2 | 494 | 38.4 | 496 | 38.6 | 499 | 38.8 | 501 | 38.9 | 503 |
| 1 293 | 38.0 | 491 | 38.2 | 494 | 38.4 | 496 | 38.5 | 498 | 38.7 | 500 | 38.9 | 503 | 39.0 | 505 |
| 1 294 | 38.1 | 493 | 38.3 | 496 | 38.5 | 498 | 38.6 | 500 | 38.8 | 502 | 39.0 | 504 | 39.2 | 507 |
| 1 295 | 38.2 | 495 | 38.4 | 497 | 38.6 | 500 | 38.8 | 502 | 38.9 | 504 | 39.1 | 506 | 39.3 | 509 |
| 1 296 | 38.4 | 497 | 38.5 | 499 | 38.7 | 502 | 38.9 | 504 | 39.0 | 506 | 39.2 | 508 | 39.4 | 510 |
| 1 297 | 38.5 | 499 | 38.6 | 501 | 38.8 | 503 | 39.0 | 506 | 39.2 | 508 | 39.3 | 510 | 59.5 | 512 |
| 1 298 | 38.6 | 501 | 38.8 | 503 | 38.9 | 505 | 39.1 | 508 | 39.3 | 510 | 39.4 | 512 | 39.6 | 514 |
| 1 299 | 38.7 | 503 | 38.9 | 505 | 39.0 | 507 | 39.2 | 509 | 39.4 | 512 | 39.6 | 514 | 39.7 | 516 |
| 1 300 | 38.8 | 505 | 39.0 | 507 | 39.2 | 509 | 39.3 | 511 | 39.5 | 514 | 39.7 | 516 | 39.9 | 518 |
| 1 301 | 38.9 | 506 | 39.1 | 509 | 39.3 | 511 | 39.4 | 513 | 39.6 | 515 | 39.8 | 518 | 40.0 | 520 |
| 1 302 | 39.0 | 508 | 39.2 | 511 | 39.4 | 513 | 39.6 | 515 | 39.7 | 517 | 39.9 | 520 | 40.1 | 522 |
| 1 303 | 39.2 | 510 | 39.3 | 512 | 39.5 | 515 | 39.7 | 517 | 39.9 | 519 | 40.0 | 521 | 40.2 | 524 |
| 1 304 | 39.3 | 512 | 39.4 | 514 | 39.6 | 517 | 39.8 | 519 | 40.0 | 521 | 40.1 | 523 | 40.3 | 526 |
| 1 305 | 39.4 | 514 | 39.6 | 516 | 39.7 | 519 | 39.9 | 521 | 40.1 | 523 | 40.3 | 525 | 40.4 | 527 |
| 1 306 | 39.5 | 516 | 39.7 | 518 | 39.8 | 520 | 40.0 | 523 | 40.2 | 525 | 40.4 | 527 | 40.5 | 529 |
| 1 307 | 39.6 | 518 | 39.8 | 520 | 40.0 | 522 | 40.1 | 524 | 40.3 | 527 | 40.5 | 529 | 40.7 | 531 |
| 1 308 | 39.7 | 520 | 39.9 | 522 | 40.1 | 524 | 40.2 | 526 | 40.4 | 529 | 40.6 | 531 | 40.8 | 532 |
| 1 309 | 39.9 | 522 | 40.0 | 524 | 40.2 | 526 | 40.4 | 528 | 40.5 | 531 | 40.7 | 533 | 40.9 | 535 |
| 1 310 | 40.0 | 523 | 40.1 | 526 | 40.3 | 528 | 40.5 | 530 | 40.6 | 533 | 40.8 | 535 | 41.0 | 537 |
| 1 311 | 40.1 | 525 | 40.3 | 528 | 40.4 | 530 | 40.6 | 532 | 40.8 | 534 | 40.9 | 537 | 41.1 | 539 |
| 1 312 | 40.2 | 527 | 40.4 | 530 | 40.5 | 532 | 40.7 | 534 | 40.9 | 536 | 41.0 | 538 | 41.2 | 541 |
| 1 313 | 40.3 | 529 | 40.5 | 532 | 40.6 | 534 | 40.8 | 536 | 41.0 | 538 | 41.2 | 540 | 41.3 | 543 |
| 1 314 | 40.4 | 531 | 40.6 | 533 | 40.8 | 536 | 40.9 | 538 | 41.1 | 540 | 41.3 | 542 | 41.4 | 545 |
| 1 315 | 40.5 | 533 | 40.7 | 535 | 40.9 | 537 | 41.0 | 540 | 41.2 | 542 | 41.4 | 544 | 41.6 | 546 |
| 1 316 | 40.6 | 535 | 40.8 | 537 | 41.0 | 539 | 41.2 | 542 | 41.3 | 544 | 41.5 | 546 | 41.7 | 548 |
| 1 317 | 40.8 | 537 | 40.9 | 539 | 41.1 | 541 | 41.3 | 544 | 41.4 | 546 | 41.6 | 548 | 41.8 | 550 |
| 1 318 | 40.9 | 539 | 41.0 | 541 | 41.2 | 543 | 41.4 | 545 | 41.6 | 548 | 41.7 | 550 | 41.9 | 552 |
| 1 319 | 41.0 | 541 | 41.2 | 543 | 41.3 | 545 | 41.5 | 547 | 41.7 | 550 | 41.8 | 551 | 42.0 | 554 |
| 1 320 | 41.1 | 543 | 41.3 | 545 | 41.4 | 547 | 41.6 | 549 | 41.8 | 551 | 41.9 | 554 | 42.1 | 556 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 38.3 | 492 | 38.5 | 494 | 38.6 | 496 | 38.8 | 499 | 39.0 | 501 | 39.2 | 503 | 39.3 | 505 | 39.5 | 507 | 39.7 | 510 | **1 285** |
| 38.4 | 494 | 38.6 | 496 | 38.7 | 498 | 38.9 | 501 | 39.1 | 503 | 39.3 | 505 | 39.4 | 507 | 39.6 | 509 | 39.8 | 511 | **1 286** |
| 38.5 | 496 | 38.7 | 498 | 38.9 | 500 | 39.0 | 503 | 39.2 | 505 | 39.4 | 507 | 39.5 | 509 | 39.7 | 511 | 39.9 | 513 | **1 287** |
| 38.6 | 498 | 38.8 | 500 | 39.0 | 502 | 39.2 | 504 | 39.3 | 506 | 39.5 | 509 | 39.7 | 511 | 39.8 | 513 | 40.0 | 515 | **1 288** |
| 38.8 | 499 | 38.9 | 502 | 39.1 | 504 | 39.3 | 506 | 39.4 | 508 | 39.6 | 511 | 39.8 | 513 | 39.9 | 515 | 40.1 | 517 | **1 289** |
| 38.9 | 501 | 39.0 | 503 | 39.2 | 506 | 39.4 | 508 | 39.6 | 510 | 39.7 | 513 | 39.9 | 515 | 40.1 | 517 | 40.2 | 519 | **1 290** |
| 39.0 | 503 | 39.1 | 505 | 39.3 | 508 | 39.5 | 510 | 39.7 | 512 | 39.8 | 514 | 40.0 | 517 | 40.2 | 519 | 40.3 | 521 | **1 291** |
| 39.1 | 505 | 39.3 | 507 | 39.4 | 510 | 39.6 | 512 | 39.8 | 514 | 40.0 | 516 | 40.1 | 518 | 40.3 | 521 | 40.5 | 523 | **1 292** |
| 39.2 | 507 | 39.4 | 509 | 39.6 | 511 | 39.7 | 514 | 39.9 | 516 | 40.1 | 518 | 40.2 | 520 | 40.4 | 522 | 40.6 | 525 | **1 293** |
| 39.3 | 509 | 39.5 | 511 | 39.7 | 513 | 39.9 | 516 | 40.0 | 518 | 40.2 | 520 | 40.4 | 522 | 40.5 | 524 | 40.7 | 527 | **1 294** |
| 39.4 | 511 | 39.6 | 513 | 39.8 | 515 | 40.0 | 518 | 40.1 | 520 | 40.3 | 522 | 40.5 | 524 | 40.6 | 526 | 40.8 | 528 | **1 292** |
| 39.6 | 513 | 39.7 | 515 | 39.9 | 517 | 40.1 | 519 | 40.2 | 522 | 40.4 | 524 | 40.6 | 526 | 40.8 | 528 | 40.9 | 530 | **1 293** |
| 39.7 | 515 | 39.8 | 517 | 40.0 | 519 | 40.2 | 521 | 40.4 | 523 | 40.5 | 526 | 40.7 | 528 | 40.9 | 530 | 41.0 | 532 | **1 297** |
| 39.8 | 516 | 40.0 | 519 | 40.1 | 521 | 40.3 | 523 | 40.5 | 525 | 40.6 | 527 | 40.8 | 530 | 41.0 | 532 | 41.1 | 534 | **1 298** |
| 39.9 | 518 | 40.1 | 521 | 40.2 | 523 | 40.4 | 525 | 40.6 | 527 | 40.7 | 529 | 40.9 | 532 | 41.1 | 534 | 41.3 | 536 | **1 299** |
| 40.0 | 520 | 40.2 | 522 | 40.4 | 525 | 40.5 | 527 | 40.7 | 529 | 40.9 | 531 | 41.0 | 534 | 41.2 | 536 | 41.4 | 538 | **1 300** |
| 40.1 | 522 | 40.3 | 524 | 40.5 | 527 | 40.6 | 529 | 40.8 | 531 | 41.0 | 533 | 41.2 | 535 | 41.3 | 538 | 41.5 | 540 | **1 301** |
| 40.3 | 524 | 40.4 | 526 | 40.6 | 528 | 40.8 | 531 | 40.9 | 533 | 41.1 | 535 | 41.3 | 537 | 41.4 | 540 | 41.6 | 542 | **1 302** |
| 40.4 | 526 | 40.5 | 528 | 40.7 | 530 | 40.9 | 533 | 41.0 | 535 | 41.2 | 537 | 41.4 | 539 | 41.6 | 541 | 41.7 | 544 | **1 303** |
| 40.5 | 528 | 40.6 | 530 | 40.8 | 532 | 41.0 | 535 | 41.2 | 537 | 41.3 | 539 | 41.5 | 541 | 41.7 | 543 | 41.8 | 545 | **1 304** |
| 40.6 | 530 | 40.8 | 532 | 40.9 | 534 | 41.1 | 536 | 41.3 | 539 | 41.4 | 541 | 41.6 | 543 | 41.8 | 545 | 41.9 | 547 | **1 305** |
| 40.7 | 532 | 40.9 | 534 | 41.0 | 536 | 41.2 | 538 | 41.4 | 541 | 41.6 | 543 | 41.7 | 544 | 41.9 | 547 | 42.1 | 549 | **1 306** |
| 40.8 | 534 | 41.0 | 536 | 41.2 | 538 | 41.3 | 540 | 41.5 | 542 | 41.7 | 544 | 41.8 | 547 | 42.0 | 549 | 42.2 | 551 | **1 307** |
| 40.9 | 535 | 41.1 | 538 | 41.3 | 540 | 41.4 | 542 | 41.6 | 544 | 41.8 | 546 | 42.0 | 549 | 42.1 | 551 | 42.3 | 553 | **1 308** |
| 41.0 | 537 | 41.2 | 539 | 41.4 | 541 | 41.6 | 544 | 41.7 | 546 | 41.9 | 548 | 42.1 | 551 | 42.2 | 553 | 42.4 | 555 | **1 309** |
| 41.2 | 539 | 41.3 | 541 | 41.5 | 543 | 41.7 | 546 | 41.8 | 548 | 42.0 | 550 | 42.2 | 553 | 42.3 | 555 | 42.5 | 557 | **1 310** |
| 41.3 | 541 | 41.4 | 543 | 41.6 | 546 | 41.8 | 548 | 42.0 | 550 | 42.1 | 552 | 42.3 | 554 | 42.5 | 557 | 42.6 | 559 | **1 311** |
| 41.4 | 543 | 41.5 | 545 | 41.7 | 547 | 41.9 | 550 | 42.1 | 552 | 42.2 | 554 | 42.4 | 556 | 42.6 | 559 | 42.7 | 561 | **1 312** |
| 41.5 | 545 | 41.6 | 547 | 41.8 | 549 | 42.0 | 552 | 42.2 | 554 | 42.3 | 556 | 42.5 | 558 | 42.7 | 560 | 42.8 | 562 | **1 313** |
| 41.6 | 547 | 41.8 | 549 | 42.0 | 551 | 42.1 | 553 | 42.3 | 556 | 42.5 | 558 | 42.6 | 560 | 42.8 | 562 | 43.0 | 564 | **1 314** |
| 41.7 | 549 | 41.9 | 551 | 42.1 | 553 | 42.2 | 555 | 42.4 | 558 | 42.6 | 560 | 42.7 | 562 | 42.9 | 564 | 43.1 | 566 | **1 315** |
| 41.8 | 550 | 42.0 | 553 | 42.2 | 555 | 42.3 | 557 | 42.5 | 559 | 42.7 | 562 | 42.9 | 564 | 43.0 | 566 | 43.2 | 568 | **1 316** |
| 41.9 | 552 | 42.1 | 555 | 42.3 | 557 | 42.5 | 559 | 42.6 | 561 | 42.8 | 564 | 43.0 | 566 | 43.1 | 568 | 43.3 | 570 | **1 317** |
| 42.1 | 554 | 42.2 | 556 | 42.4 | 559 | 42.6 | 561 | 42.7 | 563 | 42.9 | 566 | 43.1 | 568 | 43.2 | 570 | 43.4 | 572 | **1 318** |
| 42.2 | 556 | 42.3 | 558 | 42.5 | 561 | 42.7 | 563 | 42.8 | 565 | 43.0 | 567 | 43.2 | 570 | 43.4 | 572 | 43.5 | 574 | **1 319** |
| 42.3 | 568 | 42.4 | 560 | 42.6 | 563 | 42.8 | 565 | 43.0 | 567 | 43.1 | 569 | 43.3 | 572 | 43.5 | 574 | 43.6 | 576 | **1 320** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 321 | 41.2 | 544 | 41.4 | 547 | 41.6 | 549 | 41.7 | 551 | 41.9 | 553 | 42.1 | 555 | 42.2 | 558 |
| 1 322 | 41.3 | 546 | 41.5 | 549 | 41.7 | 551 | 41.8 | 553 | 42.0 | 555 | 42.2 | 557 | 42.3 | 560 |
| 1 323 | 41.4 | 548 | 41.6 | 551 | 41.8 | 553 | 42.0 | 555 | 42.1 | 557 | 42.3 | 559 | 42.4 | 562 |
| 1 324 | 41.6 | 550 | 41.7 | 552 | 41.9 | 555 | 42.1 | 557 | 42.2 | 559 | 42.4 | 561 | 42.6 | 563 |
| 1 325 | 41.7 | 552 | 41.8 | 554 | 42.0 | 557 | 42.2 | 559 | 42.3 | 561 | 42.5 | 563 | 42.7 | 565 |
| 1 326 | 41.8 | 554 | 41.9 | 556 | 42.1 | 558 | 42.3 | 561 | 42.5 | 563 | 42.6 | 565 | 42.8 | 567 |
| 1 327 | 41.9 | 556 | 42.1 | 558 | 42.2 | 560 | 42.4 | 563 | 42.6 | 565 | 42.7 | 567 | 42.9 | 569 |
| 1 328 | 42.0 | 558 | 42.2 | 560 | 42.3 | 562 | 42.5 | 564 | 42.7 | 567 | 42.8 | 569 | 43.0 | 571 |
| 1 329 | 42.1 | 560 | 42.3 | 562 | 42.4 | 564 | 42.6 | 566 | 42.8 | 569 | 43.0 | 571 | 43.1 | 573 |
| 1 330 | 42.2 | 562 | 42.4 | 564 | 42.6 | 566 | 42.7 | 568 | 42.9 | 571 | 43.1 | 573 | 43.2 | 575 |
| 1 331 | 42.3 | 563 | 42.5 | 566 | 42.7 | 568 | 42.8 | 570 | 43.0 | 572 | 43.2 | 575 | 43.3 | 577 |
| 1 332 | 42.4 | 565 | 42.6 | 568 | 42.8 | 570 | 43.0 | 572 | 43.1 | 574 | 43.3 | 577 | 43.5 | 579 |
| 1 333 | 42.6 | 567 | 42.7 | 569 | 42.9 | 572 | 43.1 | 574 | 43.2 | 576 | 43.4 | 579 | 43.6 | 581 |
| 1 334 | 42.7 | 569 | 42.8 | 571 | 43.0 | 574 | 43.2 | 576 | 43.3 | 578 | 43.5 | 580 | 43.7 | 583 |
| 1 335 | 42.8 | 571 | 42.9 | 573 | 43.1 | 576 | 43.3 | 578 | 43.4 | 580 | 43.6 | 582 | 43.8 | 585 |
| 1 336 | 42.9 | 573 | 43.1 | 575 | 43.2 | 577 | 43.4 | 580 | 43.6 | 582 | 43.7 | 584 | 43.9 | 587 |
| 1 337 | 43.0 | 575 | 43.2 | 577 | 43.3 | 579 | 43.5 | 582 | 43.7 | 584 | 43.8 | 586 | 44.0 | 588 |
| 1 338 | 43.1 | 577 | 43.3 | 579 | 43.4 | 581 | 43.6 | 584 | 43.8 | 586 | 44.0 | 588 | 44.1 | 590 |
| 1 339 | 43.2 | 579 | 43.4 | 581 | 43.5 | 583 | 43.7 | 585 | 43.9 | 588 | 44.1 | 590 | 44.2 | 592 |
| 1 340 | 43.3 | 581 | 43.5 | 583 | 43.7 | 585 | 43.8 | 587 | 44.0 | 590 | 44.2 | 592 | 44.3 | 594 |
| 1 341 | 43.4 | 583 | 43.6 | 585 | 43.8 | 587 | 43.9 | 589 | 44.1 | 592 | 44.3 | 594 | 44.4 | 596 |
| 1 342 | 43.5 | 584 | 43.7 | 587 | 43.9 | 589 | 44.1 | 591 | 44.2 | 593 | 44.4 | 596 | 44.6 | 598 |
| 1 343 | 43.7 | 586 | 43.8 | 589 | 44.0 | 591 | 44.2 | 593 | 44.3 | 595 | 44.5 | 598 | 44.7 | 600 |
| 1 344 | 43.8 | 588 | 43.9 | 590 | 44.1 | 593 | 44.3 | 595 | 44.4 | 597 | 44.6 | 600 | 44.8 | 602 |
| 1 345 | 43.9 | 590 | 44.0 | 692 | 44.2 | 595 | 44.4 | 597 | 44.5 | 599 | 44.7 | 601 | 44.9 | 604 |
| 1 346 | 44.0 | 592 | 44.2 | 594 | 44.3 | 597 | 44.5 | 599 | 44.7 | 601 | 44.8 | 603 | 45.0 | 606 |
| 1 347 | 44.1 | 594 | 44.3 | 596 | 44.4 | 598 | 44.6 | 601 | 44.8 | 603 | 44.9 | 605 | 45.1 | 607 |
| 1 348 | 44.2 | 596 | 44.4 | 598 | 44.5 | 600 | 44.7 | 603 | 44.9 | 605 | 45.0 | 607 | 45.2 | 609 |
| 1 349 | 44.3 | 598 | 44.5 | 600 | 44.6 | 602 | 44.8 | 604 | 45.0 | 607 | 45.2 | 609 | 45.3 | 611 |
| 1 350 | 44.4 | 600 | 44.6 | 602 | 44.8 | 604 | 44.9 | 606 | 45.1 | 609 | 45.3 | 611 | 45.4 | 613 |
| 1 351 | 44.5 | 602 | 44.7 | 604 | 44.9 | 606 | 45.0 | 608 | 45.2 | 611 | 45.4 | 613 | 45.5 | 615 |
| 1 352 | 44.6 | 604 | 44.8 | 606 | 45.0 | 608 | 45.1 | 610 | 45.3 | 612 | 45.5 | 615 | 45.6 | 617 |
| 1 353 | 44.7 | 605 | 44.9 | 608 | 45.1 | 610 | 45.2 | 612 | 45.4 | 614 | 45.6 | 617 | 45.7 | 619 |
| 1 354 | 44.9 | 607 | 45.0 | 610 | 45.2 | 612 | 45.4 | 614 | 45.5 | 616 | 45.7 | 619 | 45.8 | 621 |
| 1 355 | 45.0 | 609 | 45.1 | 612 | 45.3 | 614 | 45.5 | 616 | 45.6 | 619 | 45.8 | 620 | 46.0 | 623 |
| 1 356 | 45.1 | 611 | 45.2 | 613 | 45.4 | 616 | 45.6 | 618 | 45.7 | 620 | 45.9 | 622 | 46.1 | 625 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 42.4 | 560 | 42.6 | 562 | 42.7 | 565 | 42.9 | 567 | 43.1 | 569 | 43.2 | 570 | 43.4 | 573 | 43.6 | 576 | 43.7 | 578 | **1 321** |
| 42.5 | 562 | 42.7 | 564 | 42.9 | 566 | 43.0 | 569 | 43.2 | 571 | 43.4 | 573 | 43.5 | 575 | 43.7 | 577 | 43.8 | 580 | **1 322** |
| 42.6 | 564 | 42.8 | 566 | 43.0 | 568 | 43.1 | 571 | 43.3 | 573 | 43.5 | 575 | 43.6 | 577 | 43.8 | 579 | 44.0 | 581 | **1 323** |
| 42.7 | 566 | 42.9 | 568 | 43.1 | 570 | 43.2 | 572 | 43.4 | 575 | 43.6 | 577 | 43.7 | 579 | 43.9 | 581 | 44.1 | 583 | **1 324** |
| 42.8 | 568 | 43.0 | 570 | 43.2 | 572 | 43.4 | 574 | 43.5 | 577 | 43.7 | 579 | 43.9 | 581 | 44.0 | 583 | 44.2 | 585 | **1 325** |
| 43.0 | 570 | 43.1 | 572 | 43.3 | 574 | 43.5 | 576 | 43.6 | 579 | 43.8 | 581 | 44.0 | 583 | 44.1 | 585 | 44.3 | 587 | **1 326** |
| 43.1 | 571 | 43.2 | 574 | 43.4 | 576 | 43.6 | 578 | 43.7 | 581 | 43.9 | 583 | 44.1 | 585 | 44.2 | 587 | 44.4 | 589 | **1 327** |
| 43.2 | 573 | 43.3 | 576 | 43.5 | 578 | 43.7 | 580 | 43.9 | 583 | 44.0 | 585 | 44.2 | 587 | 44.3 | 589 | 44.5 | 591 | **1 328** |
| 43.3 | 575 | 43.5 | 578 | 41.0 | 580 | 43.8 | 582 | 44.0 | 585 | 44.1 | 586 | 44.3 | 589 | 44.4 | 591 | 44.6 | 593 | **1 329** |
| 43.4 | 577 | 43.6 | 579 | 43.7 | 582 | 43.9 | 584 | 44.1 | 586 | 44.2 | 588 | 44.4 | 591 | 44.6 | 593 | 44.7 | 595 | **1 330** |
| 43.5 | 579 | 43.7 | 581 | 43.9 | 584 | 44.0 | 586 | 44.2 | 588 | 44.4 | 590 | 44.5 | 592 | 44.7 | 595 | 44.8 | 597 | **1 331** |
| 43.6 | 581 | 43.8 | 583 | 44.0 | 586 | 44.1 | 588 | 44.3 | 590 | 44.5 | 592 | 44.6 | 594 | 44.8 | 596 | 45.0 | 599 | **1 332** |
| 43.7 | 583 | 43.9 | 585 | 44.1 | 588 | 44.2 | 590 | 44.4 | 592 | 44.6 | 594 | 44.7 | 596 | 44.9 | 598 | 45.1 | 601 | **1 333** |
| 43.9 | 585 | 44.0 | 587 | 44.2 | 589 | 44.4 | 592 | 44.5 | 594 | 44.7 | 596 | 44.8 | 598 | 45.0 | 600 | 45.2 | 603 | **1 334** |
| 44.0 | 587 | 44.1 | 589 | 44.3 | 591 | 44.5 | 594 | 44.6 | 596 | 44.8 | 598 | 45.0 | 600 | 45.1 | 602 | 45.3 | 604 | **1 335** |
| 44.1 | 589 | 44.2 | 591 | 44.4 | 593 | 44.6 | 595 | 44.7 | 598 | 44.9 | 600 | 45.1 | 602 | 45.2 | 604 | 45.4 | 606 | **1 336** |
| 44.2 | 591 | 44.4 | 593 | 44.5 | 595 | 44.7 | 597 | 44.9 | 600 | 45.0 | 602 | 45.2 | 604 | 45.3 | 606 | 45.5 | 608 | **1 337** |
| 44.3 | 593 | 44.5 | 595 | 44.6 | 597 | 44.8 | 599 | 45.0 | 602 | 45.1 | 604 | 45.3 | 606 | 45.4 | 608 | 45.6 | 610 | **1 338** |
| 44.4 | 595 | 44.6 | 597 | 44.7 | 599 | 44.9 | 601 | 45.1 | 603 | 45.2 | 605 | 45.4 | 608 | 45.5 | 610 | 45.7 | 612 | **1 339** |
| 44.5 | 596 | 44.7 | 599 | 44.8 | 601 | 44.0 | 603 | 45.2 | 605 | 45.3 | 607 | 45.4 | 610 | 45.7 | 612 | 45.8 | 614 | **1 340** |
| 44.6 | 598 | 44.8 | 601 | 45.0 | 605 | 45.1 | 605 | 45.3 | 607 | 45.4 | 609 | 45.6 | 611 | 45.8 | 614 | 45.9 | 616 | **1 341** |
| 44.7 | 600 | 44.9 | 603 | 45.1 | 605 | 45.2 | 607 | 45.4 | 609 | 45.5 | 611 | 45.7 | 613 | 45.9 | 616 | 46.0 | 618 | **1 342** |
| 44.8 | 602 | 45.0 | 604 | 45.2 | 607 | 45.3 | 609 | 45.5 | 611 | 45.7 | 613 | 45.8 | 615 | 46.0 | 618 | 46.1 | 620 | **1 343** |
| 44.9 | 604 | 45.1 | 606 | 45.3 | 609 | 45.4 | 611 | 45.6 | 613 | 45.8 | 615 | 45.9 | 617 | 46.1 | 619 | 46.2 | 622 | **1 344** |
| 45.1 | 606 | 45.2 | 608 | 45.4 | 610 | 45.5 | 613 | 45.7 | 615 | 45.9 | 617 | 46.0 | 619 | 46.2 | 621 | 46.4 | 623 | **1 345** |
| 45.2 | 608 | 45.3 | 610 | 45.5 | 612 | 45.7 | 614 | 45.8 | 617 | 46.0 | 619 | 46.1 | 621 | 46.3 | 623 | 46.5 | 625 | **1 346** |
| 45.3 | 610 | 45.4 | 612 | 45.6 | 614 | 45.8 | 616 | 45.9 | 618 | 46.1 | 621 | 46.2 | 623 | 46.4 | 625 | 46.6 | 627 | **1 347** |
| 45.4 | 612 | 45.5 | 614 | 45.1 | 616 | 45.9 | 618 | 46.0 | 620 | 46.2 | 623 | 46.4 | 625 | 46.5 | 627 | 46.7 | 629 | **1 348** |
| 45.5 | 614 | 45.7 | 616 | 45.8 | 618 | 46.0 | 620 | 46.1 | 622 | 46.3 | 625 | 46.5 | 627 | 46.6 | 629 | 46.8 | 631 | **1 349** |
| 45.6 | 615 | 45.8 | 618 | 45.9 | 620 | 46.1 | 622 | 46.2 | 624 | 46.4 | 626 | 46.6 | 629 | 46.7 | 631 | 46.9 | 633 | **1 350** |
| 45.7 | 617 | 45.9 | 620 | 46.0 | 622 | 46.2 | 624 | 46.3 | 626 | 46.5 | 628 | 46.7 | 631 | 46.8 | 633 | 47.0 | 635 | **1 351** |
| 45.8 | 619 | 46.0 | 622 | 46.1 | 624 | 46.3 | 626 | 46.5 | 628 | 46.6 | 630 | 46.8 | 632 | 47.0 | 635 | 47.1 | 637 | **1 352** |
| 45.9 | 621 | 46.1 | 623 | 46.2 | 625 | 46.4 | 628 | 46.6 | 630 | 46.7 | 632 | 46.9 | 634 | 47.1 | 637 | 47.2 | 639 | **1 353** |
| 46.0 | 623 | 46.2 | 625 | 46.3 | 627 | 46.5 | 630 | 46.7 | 632 | 46.8 | 634 | 47.0 | 636 | 47.2 | 639 | 47.3 | 641 | **1 354** |
| 46.1 | 625 | 46.3 | 627 | 46.5 | 629 | 46.6 | 632 | 46.8 | 634 | 46.9 | 636 | 47.1 | 638 | 47.3 | 640 | 47.4 | 643 | **1 355** |
| 46.2 | 627 | 46.4 | 629 | 46.6 | 631 | 46.7 | 634 | 46.9 | 636 | 47.0 | 638 | 47.2 | 640 | 47.4 | 642 | 47.5 | 645 | **1 356** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 357 | 45.2 | 613 | 45.3 | 615 | 45.5 | 618 | 45.7 | 620 | 45.8 | 622 | 46.0 | 624 | 46.2 | 627 |
| 1 358 | 45.3 | 615 | 45.5 | 617 | 45.6 | 620 | 45.8 | 622 | 46.0 | 624 | 46.1 | 626 | 46.3 | 628 |
| 1 358 | 45.4 | 617 | 45.6 | 619 | 45.7 | 621 | 45.9 | 624 | 46.1 | 626 | 46.2 | 628 | 46.4 | 630 |
| 1 360 | 45.5 | 619 | 45.7 | 621 | 45.8 | 623 | 46.0 | 626 | 46.2 | 628 | 46.3 | 630 | 46.5 | 632 |
| 1 361 | 45.6 | 621 | 45.8 | 623 | 45.9 | 625 | 46.1 | 627 | 46.3 | 630 | 46.4 | 632 | 46.6 | 634 |
| 1 362 | 45.7 | 623 | 45.9 | 625 | 45.1 | 627 | 46.2 | 629 | 46.4 | 632 | 46.5 | 634 | 46.7 | 636 |
| 1 363 | 45.8 | 625 | 46.0 | 627 | 46.2 | 629 | 46.3 | 631 | 46.5 | 634 | 46.6 | 636 | 46.8 | 638 |
| 1 364 | 45.9 | 627 | 46.1 | 629 | 46.3 | 631 | 46.4 | 633 | 46.6 | 635 | 46.8 | 638 | 46.9 | 640 |
| 1 365 | 46.0 | 628 | 46.2 | 631 | 46.4 | 633 | 46.5 | 635 | 46.7 | 637 | 46.9 | 640 | 47.0 | 642 |
| 1 366 | 46.1 | 630 | 46.3 | 633 | 46.5 | 635 | 46.6 | 637 | 46.8 | 639 | 47.0 | 642 | 47.1 | 644 |
| 1 367 | 46.3 | 632 | 46.4 | 635 | 46.6 | 637 | 46.7 | 639 | 46.9 | 641 | 47.1 | 643 | 47.2 | 646 |
| 1 368 | 46.4 | 634 | 46.5 | 636 | 46.7 | 639 | 46.8 | 641 | 47.0 | 643 | 47.2 | 645 | 47.3 | 648 |
| 1 369 | 46.5 | 636 | 46.6 | 638 | 46.8 | 641 | 47.0 | 643 | 47.1 | 645 | 47.3 | 647 | 47.4 | 649 |
| 1 370 | 46.6 | 638 | 46.7 | 640 | 46.9 | 643 | 47.1 | 645 | 47.2 | 647 | 47.4 | 649 | 47.6 | 651 |
| 1 371 | 46.7 | 640 | 46.8 | 642 | 47.0 | 645 | 47.2 | 647 | 47.3 | 649 | 47.5 | 651 | 47.7 | 653 |
| 1 372 | 46.8 | 642 | 46.9 | 644 | 47.1 | 646 | 47.3 | 649 | 47.4 | 651 | 47.6 | 653 | 47.8 | 655 |
| 1 373 | 46.9 | 644 | 47.1 | 646 | 47.2 | 648 | 47.4 | 651 | 47.5 | 653 | 47.7 | 655 | 47.9 | 657 |
| 1 374 | 47.0 | 646 | 47.2 | 648 | 47.3 | 650 | 47.5 | 652 | 47.7 | 655 | 47.8 | 657 | 48.0 | 659 |
| 1 375 | 47.1 | 648 | 47.3 | 650 | 47.4 | 652 | 47.6 | 654 | 47.8 | 657 | 47.9 | 659 | 48.1 | 661 |
| 1 376 | 47.2 | 650 | 47.4 | 652 | 47.5 | 654 | 47.7 | 656 | 47.9 | 659 | 48.0 | 661 | 48.2 | 663 |
| 1 377 | 47.3 | 652 | 47.5 | 654 | 47.6 | 656 | 47.8 | 658 | 48.0 | 661 | 48.1 | 663 | 48.3 | 665 |
| 1 378 | 47.4 | 653 | 47.6 | 656 | 47.8 | 658 | 47.9 | 660 | 48.1 | 662 | 48.2 | 665 | 48.4 | 667 |
| 1 379 | 47.5 | 655 | 47.7 | 658 | 47.9 | 660 | 48.0 | 662 | 48.2 | 664 | 48.3 | 666 | 48.5 | 669 |
| 1 380 | 47.6 | 657 | 47.8 | 660 | 48.0 | 662 | 48.1 | 664 | 48.3 | 666 | 48.4 | 668 | 48.6 | 671 |
| 1 381 | 47.7 | 660 | 47.9 | 661 | 48.1 | 664 | 48.2 | 666 | 48.4 | 668 | 48.5 | 670 | 48.7 | 673 |
| 1 382 | 47.8 | 661 | 48.0 | 663 | 48.2 | 666 | 48.3 | 668 | 48.5 | 670 | 48.6 | 672 | 48.8 | 675 |
| 1 383 | 47.9 | 663 | 48.1 | 665 | 48.3 | 668 | 48.4 | 670 | 48.6 | 672 | 48.7 | 674 | 48.9 | 677 |
| 1 384 | 48.1 | 665 | 48.2 | 667 | 48.4 | 670 | 48.5 | 672 | 48.7 | 674 | 48.9 | 676 | 49.0 | 678 |
| 1 385 | 48.2 | 667 | 48.3 | 669 | 48.5 | 671 | 48.6 | 674 | 48.8 | 676 | 49.0 | 678 | 49.1 | 680 |
| 1 386 | 48.3 | 669 | 48.4 | 671 | 48.6 | 673 | 48.7 | 676 | 48.9 | 678 | 49.1 | 680 | 49.2 | 682 |
| 1 387 | 48.4 | 671 | 48.5 | 673 | 48.7 | 675 | 48.8 | 677 | 49.0 | 680 | 49.2 | 682 | 49.3 | 684 |
| 1 388 | 48.5 | 673 | 48.6 | 675 | 48.8 | 677 | 48.9 | 679 | 49.1 | 682 | 49.3 | 684 | 49.4 | 686 |
| 1 389 | 48.6 | 675 | 48.7 | 677 | 48.9 | 679 | 49.1 | 681 | 49.2 | 684 | 49.4 | 686 | 49.5 | 688 |
| 1 390 | 48.7 | 677 | 48.8 | 679 | 49.0 | 681 | 49.2 | 683 | 49.3 | 686 | 49.5 | 688 | 49.6 | 690 |
| 1 391 | 48.8 | 679 | 48.9 | 681 | 49.1 | 683 | 49.3 | 685 | 49.4 | 687 | 49.6 | 690 | 49.7 | 692 |
| 1 392 | 48.9 | 680 | 49.0 | 683 | 49.2 | 685 | 49.4 | 687 | 49.5 | 689 | 49.7 | 692 | 49.8 | 694 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 46.3 | 629 | 46.5 | 631 | 46.7 | 633 | 46.8 | 635 | 47.0 | 638 | 47.2 | 640 | 47.3 | 642 | 47.5 | 644 | 47.6 | 646 | **1 357** |
| 46.4 | 631 | 46.6 | 633 | 46.8 | 635 | 46.9 | 637 | 47.1 | 640 | 47.3 | 642 | 47.4 | 644 | 47.6 | 646 | 47.7 | 648 | **1 358** |
| 46.6 | 633 | 46.7 | 635 | 46.9 | 637 | 47.0 | 639 | 47.2 | 641 | 47.4 | 644 | 47.5 | 646 | 47.7 | 648 | 47.9 | 650 | **1 359** |
| 46.7 | 635 | 46.8 | 637 | 47.0 | 639 | 47.1 | 641 | 47.3 | 642 | 47.5 | 646 | 47.6 | 648 | 47.8 | 650 | 48.0 | 652 | **1 360** |
| 46.8 | 636 | 46.9 | 639 | 47.1 | 641 | 47.3 | 643 | 47.4 | 645 | 47.6 | 648 | 47.7 | 650 | 47.9 | 652 | 48.1 | 654 | **1 361** |
| 46.9 | 638 | 47.0 | 641 | 47.2 | 643 | 47.4 | 645 | 47.5 | 647 | 47.7 | 649 | 47.8 | 652 | 48.0 | 654 | 48.2 | 655 | **1 362** |
| 47.0 | 640 | 47.1 | 643 | 47.3 | 645 | 47.5 | 647 | 47.6 | 649 | 47.8 | 651 | 47.9 | 654 | 48.1 | 656 | 48.3 | 658 | **1 363** |
| 47.1 | 642 | 47.2 | 644 | 47.4 | 647 | 47.6 | 649 | 47.7 | 651 | 47.9 | 653 | 48.1 | 655 | 48.2 | 658 | 48.4 | 660 | **1 364** |
| 47.2 | 644 | 47.3 | 646 | 47.5 | 649 | 47.7 | 651 | 47.8 | 653 | 48.0 | 655 | 48.2 | 657 | 48.3 | 660 | 48.5 | 662 | **1 365** |
| 47.3 | 646 | 47.5 | 648 | 47.6 | 650 | 47.8 | 653 | 47.9 | 655 | 48.1 | 657 | 48.3 | 659 | 48.4 | 662 | 48.6 | 664 | **1 366** |
| 47.4 | 648 | 47.6 | 650 | 47.7 | 652 | 47.9 | 655 | 48.0 | 657 | 48.2 | 659 | 48.4 | 661 | 48.5 | 664 | 48.7 | 666 | **1 367** |
| 47.5 | 650 | 47.7 | 652 | 47.8 | 654 | 48.0 | 657 | 48.1 | 659 | 48.3 | 661 | 48.5 | 663 | 48.6 | 665 | 48.8 | 668 | **1 368** |
| 47.6 | 652 | 47.8 | 654 | 47.9 | 656 | 48.1 | 658 | 48.3 | 661 | 48.4 | 663 | 48.6 | 665 | 48.7 | 667 | 48.9 | 669 | **1 369** |
| 47.7 | 654 | 47.9 | 656 | 48.0 | 658 | 48.2 | 660 | 48.4 | 663 | 48.5 | 665 | 48.7 | 667 | 48.9 | 669 | 49.0 | 671 | **1 370** |
| 47.8 | 656 | 48.0 | 658 | 48.1 | 660 | 48.3 | 662 | 48.5 | 665 | 48.6 | 667 | 48.8 | 669 | 49.0 | 671 | 49.1 | 673 | **1 371** |
| 47.9 | 658 | 48.1 | 660 | 48.3 | 662 | 48.4 | 664 | 48.6 | 666 | 48.7 | 669 | 48.9 | 671 | 49.1 | 673 | 49.2 | 675 | **1 372** |
| 48.0 | 659 | 48.2 | 662 | 48.4 | 664 | 48.5 | 666 | 48.7 | 668 | 48.8 | 671 | 49.0 | 673 | 49.2 | 675 | 49.3 | 677 | **1 373** |
| 48.1 | 661 | 48.3 | 664 | 48.5 | 666 | 48.6 | 668 | 48.8 | 670 | 48.9 | 673 | 49.1 | 675 | 49.3 | 677 | 49.4 | 679 | **1 374** |
| 48.2 | 663 | 48.4 | 666 | 48.6 | 668 | 48.7 | 670 | 48.9 | 672 | 49.1 | 674 | 49.2 | 677 | 49.4 | 679 | 49.5 | 681 | **1 375** |
| 48.4 | 665 | 48.5 | 667 | 48.7 | 670 | 48.8 | 672 | 49.0 | 674 | 49.2 | 676 | 49.3 | 679 | 49.5 | 681 | 49.6 | 683 | **1 376** |
| 48.5 | 667 | 48.6 | 669 | 48.8 | 672 | 48.9 | 674 | 49.1 | 676 | 49.3 | 678 | 49.4 | 681 | 49.6 | 683 | 49.7 | 685 | **1 377** |
| 48.6 | 669 | 48.7 | 671 | 48.9 | 674 | 49.1 | 676 | 49.2 | 678 | 49.4 | 680 | 49.5 | 682 | 49.7 | 685 | 49.8 | 687 | **1 378** |
| 48.7 | 671 | 48.8 | 673 | 49.0 | 676 | 49.2 | 678 | 49.3 | 680 | 49.5 | 682 | 49.6 | 684 | 49.8 | 687 | 49.9 | 689 | **1 379** |
| 48.8 | 673 | 48.9 | 675 | 49.1 | 677 | 49.3 | 681 | 49.4 | 682 | 49.6 | 684 | 49.7 | 686 | 49.9 | 688 | 50.1 | 691 | **1 380** |
| 48.9 | 675 | 49.0 | 677 | 49.2 | 679 | 49.4 | 682 | 49.5 | 684 | 49.7 | 686 | 49.8 | 688 | 50.0 | 691 | 50.2 | 693 | **1 381** |
| 49.0 | 677 | 49.1 | 679 | 49.3 | 681 | 49.5 | 684 | 49.6 | 686 | 49.8 | 688 | 49.9 | 690 | 50.1 | 692 | 50.3 | 694 | **1 382** |
| 49.1 | 679 | 49.2 | 681 | 49.4 | 683 | 49.6 | 685 | 49.7 | 688 | 49.9 | 690 | 50.0 | 692 | 50.2 | 694 | 50.4 | 696 | **1 383** |
| 49.2 | 681 | 49.3 | 683 | 49.5 | 685 | 49.7 | 687 | 49.8 | 690 | 50.0 | 692 | 50.1 | 694 | 50.3 | 696 | 50.5 | 698 | **1 384** |
| 49.3 | 683 | 49.4 | 685 | 49.6 | 687 | 49.8 | 689 | 49.9 | 692 | 50.1 | 694 | 50.2 | 696 | 50.4 | 698 | 50.6 | 700 | **1 385** |
| 49.4 | 685 | 49.5 | 687 | 49.7 | 689 | 49.9 | 691 | 50.0 | 693 | 50.2 | 696 | 50.3 | 698 | 50.5 | 700 | 50.7 | 702 | **1 386** |
| 49.5 | 686 | 49.6 | 689 | 49.8 | 691 | 50.0 | 693 | 50.1 | 695 | 50.3 | 698 | 50.4 | 700 | 50.6 | 702 | 50.8 | 704 | **1 387** |
| 49.6 | 688 | 49.8 | 691 | 49.9 | 693 | 50.1 | 695 | 50.2 | 697 | 50.4 | 699 | 50.5 | 702 | 50.7 | 704 | 50.9 | 706 | **1 388** |
| 49.7 | 690 | 49.9 | 692 | 50.0 | 695 | 50.2 | 697 | 50.3 | 699 | 50.5 | 701 | 50.6 | 704 | 50.8 | 706 | 51.0 | 708 | **1 389** |
| 49.8 | 692 | 50.0 | 694 | 50.1 | 697 | 50.3 | 699 | 50.4 | 701 | 50.6 | 703 | 50.7 | 705 | 50.9 | 708 | 51.1 | 710 | **1 390** |
| 49.9 | 694 | 50.1 | 696 | 50.2 | 699 | 50.4 | 701 | 50.5 | 703 | 50.7 | 705 | 50.9 | 707 | 51.0 | 710 | 51.2 | 712 | **1 391** |
| 50.0 | 696 | 50.2 | 698 | 50.3 | 700 | 50.5 | 703 | 50.6 | 705 | 50.8 | 707 | 51.0 | 709 | 51.1 | 712 | 51.3 | 714 | **1 392** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 393 | 49.0 | 682 | 49.1 | 685 | 49.3 | 687 | 49.5 | 689 | 49.6 | 691 | 49.8 | 693 | 49.9 | 696 |
| 1 394 | 49.1 | 684 | 49.2 | 687 | 49.4 | 689 | 49.6 | 691 | 49.7 | 693 | 49.9 | 695 | 50.0 | 698 |
| 1 395 | 49.2 | 686 | 49.4 | 688 | 49.5 | 691 | 49.7 | 693 | 49.8 | 695 | 50.0 | 697 | 50.2 | 700 |
| 1 396 | 49.3 | 688 | 49.5 | 690 | 49.6 | 693 | 49.8 | 695 | 49.9 | 697 | 50.1 | 699 | 50.3 | 701 |
| 1 397 | 49.4 | 690 | 49.6 | 692 | 49.7 | 694 | 49.9 | 697 | 50.0 | 699 | 50.2 | 701 | 50.4 | 704 |
| 1 398 | 49.5 | 692 | 49.7 | 694 | 49.8 | 696 | 50.0 | 699 | 50.1 | 701 | 50.3 | 703 | 50.5 | 705 |
| 1 399 | 49.6 | 694 | 49.8 | 696 | 49.9 | 698 | 50.1 | 701 | 50.2 | 703 | 50.4 | 705 | 50.6 | 707 |
| 1 400 | 49.7 | 696 | 49.9 | 698 | 50.0 | 700 | 50.2 | 703 | 50.3 | 705 | 50.5 | 707 | 50.7 | 709 |
| 1 401 | 49.8 | 698 | 50.0 | 700 | 50.1 | 702 | 50.3 | 704 | 50.4 | 707 | 50.6 | 709 | 50.8 | 711 |
| 1 402 | 49.9 | 700 | 50.1 | 702 | 50.2 | 704 | 50.4 | 706 | 50.5 | 709 | 50.7 | 711 | 50.9 | 713 |
| 1 403 | 50.0 | 702 | 50.2 | 704 | 50.3 | 706 | 50.5 | 708 | 50.6 | 710 | 50.8 | 713 | 51.0 | 715 |
| 1 404 | 50.1 | 704 | 53.3 | 706 | 50.4 | 708 | 50.6 | 710 | 50.7 | 713 | 50.9 | 715 | 51.1 | 717 |
| 1 405 | 50.2 | 705 | 50.4 | 708 | 50.5 | 710 | 50.7 | 712 | 50.8 | 714 | 51.0 | 717 | 51.2 | 719 |
| 1 406 | 50.3 | 707 | 50.5 | 710 | 50.6 | 712 | 50.8 | 714 | 50.9 | 716 | 51.1 | 719 | 51.3 | 721 |
| 1 407 | 50.4 | 709 | 50.6 | 712 | 50.7 | 714 | 50.9 | 716 | 51.0 | 718 | 51.2 | 721 | 51.4 | 723 |
| 1 408 | 50.5 | 711 | 50.7 | 714 | 50.8 | 716 | 51.0 | 718 | 51.1 | 720 | 51.3 | 722 | 51.5 | 725 |
| 1 409 | 50.6 | 715 | 50.8 | 715 | 50.9 | 718 | 51.1 | 720 | 51.2 | 722 | 51.4 | 724 | 51.6 | 727 |
| 1 410 | 50.7 | 715 | 50.9 | 717 | 51.0 | 720 | 51.2 | 722 | 51.4 | 724 | 51.5 | 726 | 51.7 | 729 |
| 1 411 | 50.8 | 717 | 51.0 | 719 | 51.1 | 722 | 51.3 | 724 | 51.5 | 726 | 51.6 | 728 | 51.8 | 730 |
| 1 412 | 50.9 | 719 | 51.1 | 721 | 51.2 | 724 | 51.4 | 726 | 51.6 | 728 | 51.7 | 730 | 51.9 | 732 |
| 1 413 | 51.0 | 721 | 51.2 | 723 | 51.3 | 725 | 51.5 | 728 | 51.7 | 730 | 51.8 | 732 | 52.0 | 734 |
| 1 414 | 51.1 | 723 | 51.3 | 725 | 51.4 | 727 | 51.6 | 729 | 51.7 | 732 | 51.9 | 734 | 52.1 | 736 |
| 1 415 | 51.2 | 725 | 51.4 | 727 | 51.5 | 729 | 51.7 | 731 | 51.8 | 734 | 52.0 | 736 | 52.2 | 738 |
| 1 416 | 51.3 | 727 | 51.5 | 729 | 51.6 | 731 | 51.8 | 733 | 52.0 | 736 | 52.1 | 738 | 52.3 | 740 |
| 1 417 | 51.4 | 729 | 51.6 | 731 | 51.7 | 733 | 51.9 | 735 | 52.1 | 738 | 52.2 | 740 | 52.4 | 742 |
| 1 418 | 51.5 | 731 | 51.7 | 733 | 51.8 | 735 | 52.0 | 737 | 52.1 | 739 | 52.3 | 742 | 52.5 | 744 |
| 1 419 | 51.6 | 732 | 51.8 | 735 | 51.9 | 737 | 52.1 | 739 | 52.3 | 741 | 52.4 | 744 | 52.6 | 746 |
| 1 420 | 51.7 | 734 | 51.9 | 737 | 52.0 | 739 | 52.2 | 741 | 52.4 | 743 | 52.5 | 746 | 52.7 | 748 |
| 1 421 | 51.8 | 736 | 52.0 | 739 | 52.1 | 741 | 52.3 | 743 | 52.5 | 745 | 52.6 | 748 | 52.8 | 750 |
| 1 422 | 51.9 | 738 | 52.1 | 741 | 52.2 | 743 | 52.4 | 745 | 52.5 | 747 | 52.7 | 750 | 52.9 | 752 |
| 1 423 | 52.0 | 740 | 52.2 | 743 | 52.3 | 745 | 52.5 | 747 | 52.7 | 749 | 52.8 | 752 | 53.0 | 754 |
| 1 424 | 52.1 | 742 | 52.3 | 744 | 52.4 | 747 | 52.6 | 749 | 52.7 | 751 | 52.9 | 754 | 53.1 | 756 |
| 1 425 | 52.2 | 744 | 52.4 | 746 | 52.5 | 749 | 52.7 | 751 | 52.8 | 753 | 53.0 | 756 | 53.2 | 758 |
| 1 426 | 52.3 | 746 | 52.5 | 748 | 52.6 | 751 | 52.8 | 753 | 52.9 | 755 | 53.1 | 757 | 53.3 | 760 |
| 1 427 | 52.4 | 748 | 52.6 | 750 | 52.7 | 752 | 52.9 | 755 | 53.0 | 757 | 53.2 | 759 | 53.4 | 762 |
| 1 428 | 52.5 | 750 | 52.7 | 752 | 52.8 | 754 | 53.0 | 757 | 53.1 | 759 | 53.3 | 761 | 53.5 | 763 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 50.1 | 698 | 50.3 | 700 | 50.4 | 702 | 50.6 | 705 | 50.7 | 707 | 50.9 | 709 | 51.1 | 711 | 51.2 | 713 | 51.4 | 716 | **1 393** |
| 50.2 | 700 | 50.4 | 702 | 50.5 | 704 | 50.7 | 707 | 50.8 | 709 | 51.0 | 711 | 51.2 | 713 | 51.3 | 716 | 51.5 | 718 | **1 394** |
| 50.3 | 702 | 50.5 | 704 | 50.6 | 706 | 50.8 | 709 | 50.9 | 711 | 51.1 | 713 | 51.3 | 715 | 51.4 | 718 | 51.6 | 720 | **1 395** |
| 50.4 | 704 | 50.6 | 706 | 50.7 | 708 | 50.9 | 711 | 51.0 | 713 | 51.2 | 715 | 51.4 | 717 | 51.5 | 719 | 51.7 | 721 | **1 396** |
| 50.5 | 706 | 50.7 | 708 | 50.8 | 710 | 51.0 | 712 | 51.2 | 715 | 51.3 | 717 | 51.5 | 719 | 51.6 | 721 | 51.8 | 724 | **1 397** |
| 50.6 | 708 | 50.8 | 710 | 50.9 | 712 | 51.1 | 714 | 51.3 | 716 | 51.4 | 719 | 51.6 | 721 | 51.7 | 723 | 51.9 | 725 | **1 398** |
| 50.7 | 710 | 50.9 | 712 | 51.0 | 714 | 51.2 | 716 | 51.4 | 718 | 51.5 | 721 | 51.7 | 723 | 51.8 | 725 | 52.0 | 727 | **1 399** |
| 50.8 | 711 | 51.0 | 714 | 51.1 | 716 | 51.3 | 718 | 51.5 | 720 | 51.6 | 723 | 51.8 | 725 | 51.9 | 727 | 52.1 | 729 | **1 400** |
| 50.9 | 713 | 51.1 | 716 | 51.2 | 718 | 51.4 | 720 | 51.6 | 722 | 51.7 | 724 | 51.9 | 727 | 52.0 | 729 | 52.2 | 731 | **1 401** |
| 51.0 | 715 | 51.2 | 718 | 51.3 | 720 | 51.5 | 722 | 51.7 | 724 | 51.8 | 727 | 52.0 | 729 | 52.1 | 731 | 52.3 | 733 | **1 402** |
| 51.1 | 717 | 51.3 | 719 | 51.4 | 722 | 51.6 | 724 | 51.8 | 726 | 51.9 | 728 | 52.1 | 731 | 52.2 | 733 | 52.4 | 735 | **1 403** |
| 51.2 | 719 | 51.4 | 721 | 51.5 | 724 | 51.7 | 726 | 51.9 | 728 | 52.0 | 730 | 52.2 | 733 | 52.3 | 735 | 52.5 | 737 | **1 404** |
| 51.3 | 721 | 51.5 | 723 | 51.6 | 726 | 51.8 | 728 | 52.0 | 730 | 52.1 | 732 | 52.3 | 735 | 52.4 | 737 | 52.6 | 739 | **1 405** |
| 51.4 | 723 | 51.6 | 725 | 51.7 | 727 | 51.9 | 730 | 52.1 | 732 | 52.2 | 734 | 52.4 | 736 | 52.5 | 739 | 52.7 | 741 | **1 406** |
| 51.5 | 725 | 51.7 | 727 | 51.8 | 729 | 52.0 | 732 | 52.2 | 734 | 52.3 | 736 | 52.5 | 738 | 52.6 | 741 | 52.8 | 743 | **1 407** |
| 51.6 | 727 | 51.8 | 729 | 51.9 | 731 | 52.1 | 734 | 52.3 | 736 | 52.4 | 738 | 52.6 | 740 | 52.7 | 742 | 52.9 | 745 | **1 408** |
| 51.7 | 729 | 51.9 | 731 | 52.0 | 733 | 52.2 | 736 | 52.4 | 738 | 52.5 | 740 | 52.7 | 742 | 52.8 | 744 | 53.0 | 747 | **1 409** |
| 51.8 | 731 | 52.0 | 733 | 52.1 | 735 | 52.3 | 738 | 52.5 | 740 | 52.6 | 742 | 52.8 | 744 | 52.9 | 746 | 53.1 | 749 | **1 410** |
| 51.9 | 733 | 52.1 | 735 | 52.2 | 737 | 52.4 | 740 | 52.6 | 742 | 52.7 | 744 | 52.9 | 746 | 53.0 | 748 | 53.2 | 751 | **1 411** |
| 52.0 | 735 | 52.2 | 737 | 52.3 | 739 | 52.5 | 741 | 52.7 | 744 | 52.8 | 746 | 53.0 | 748 | 53.1 | 750 | 53.3 | 752 | **1 412** |
| 52.1 | 737 | 52.3 | 739 | 52.4 | 741 | 52.6 | 743 | 52.8 | 745 | 52.9 | 748 | 53.1 | 750 | 53.2 | 752 | 53.4 | 754 | **1 413** |
| 52.2 | 739 | 52.4 | 741 | 52.5 | 743 | 52.7 | 745 | 52.9 | 747 | 53.0 | 750 | 53.2 | 752 | 53.3 | 754 | 53.5 | 756 | **1 414** |
| 52.3 | 740 | 52.5 | 743 | 52.6 | 745 | 52.8 | 747 | 53.0 | 749 | 53.1 | 752 | 53.3 | 754 | 53.4 | 756 | 53.6 | 758 | **1 415** |
| 52.4 | 742 | 52.6 | 745 | 52.7 | 747 | 52.9 | 749 | 53.1 | 751 | 53.2 | 754 | 53.4 | 756 | 53.5 | 758 | 53.7 | 760 | **1 416** |
| 52.5 | 744 | 52.7 | 746 | 52.8 | 749 | 53.0 | 751 | 53.2 | 753 | 53.3 | 756 | 53.5 | 758 | 53.6 | 760 | 53.8 | 762 | **1 417** |
| 52.6 | 746 | 52.8 | 748 | 52.9 | 751 | 53.1 | 753 | 53.3 | 755 | 53.4 | 758 | 53.6 | 760 | 53.7 | 762 | 53.9 | 764 | **1 418** |
| 52.7 | 748 | 52.9 | 750 | 53.0 | 753 | 53.2 | 755 | 53.4 | 757 | 53.5 | 760 | 53.7 | 762 | 53.8 | 764 | 54.0 | 766 | **1 419** |
| 52.8 | 750 | 53.0 | 752 | 53.1 | 755 | 53.3 | 757 | 53.5 | 759 | 53.6 | 762 | 53.8 | 764 | 53.9 | 766 | 54.1 | 768 | **1 420** |
| 52.9 | 752 | 53.1 | 754 | 53.2 | 757 | 53.4 | 759 | 53.6 | 761 | 53.7 | 764 | 54.9 | 766 | 54.0 | 768 | 54.2 | 770 | **1 421** |
| 53.0 | 754 | 53.2 | 756 | 53.3 | 758 | 53.5 | 761 | 53.7 | 763 | 53.8 | 766 | 54.0 | 768 | 54.1 | 770 | 54.3 | 772 | **1 422** |
| 53.1 | 756 | 53.3 | 758 | 53.4 | 760 | 53.6 | 763 | 53.8 | 765 | 53.9 | 768 | 54.1 | 770 | 54.2 | 772 | 54.4 | 774 | **1 423** |
| 53.2 | 758 | 53.4 | 760 | 53.5 | 762 | 53.7 | 765 | 53.9 | 767 | 54.0 | 770 | 54.2 | 772 | 54.3 | 774 | 54.5 | 776 | **1 424** |
| 53.3 | 760 | 53.5 | 762 | 53.6 | 764 | 53.8 | 767 | 54.0 | 769 | 54.1 | 772 | 54.3 | 773 | 54.4 | 776 | 54.6 | 778 | **1 425** |
| 53.4 | 762 | 53.6 | 764 | 53.7 | 766 | 53.9 | 769 | 54.1 | 771 | 54.2 | 773 | 54.4 | 775 | 54.5 | 777 | 54.7 | 780 | **1 426** |
| 53.5 | 764 | 53.7 | 766 | 53.8 | 768 | 54.0 | 771 | 54.2 | 773 | 54.3 | 775 | 54.5 | 777 | 54.6 | 779 | 54.8 | 782 | **1 427** |
| 53.6 | 766 | 53.8 | 768 | 53.9 | 770 | 54.1 | 773 | 54.3 | 775 | 54.4 | 777 | 54.6 | 779 | 54.7 | 781 | 54.9 | 784 | **1 428** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 429 | 52.6 | 752 | 52.8 | 754 | 52.9 | 756 | 53.1 | 759 | 53.2 | 761 | 53.4 | 763 | 53.6 | 765 |
| 1 430 | 52.7 | 754 | 52.9 | 756 | 53.0 | 758 | 53.2 | 761 | 53.3 | 763 | 53.5 | 765 | 53.7 | 767 |
| 1 431 | 52.8 | 756 | 53.0 | 758 | 53.1 | 760 | 53.3 | 763 | 53.4 | 765 | 53.6 | 767 | 53.8 | 769 |
| 1 432 | 52.9 | 758 | 53.1 | 760 | 53.2 | 762 | 53.4 | 765 | 53.5 | 767 | 53.7 | 769 | 53.9 | 771 |
| 1 433 | 53.0 | 760 | 53.2 | 762 | 53.3 | 764 | 53.5 | 767 | 53.6 | 769 | 53.8 | 771 | 54.0 | 773 |
| 1 434 | 53.1 | 762 | 53.3 | 764 | 53.4 | 766 | 53.6 | 768 | 53.7 | 771 | 53.9 | 773 | 54.1 | 775 |
| 1 435 | 53.2 | 764 | 53.4 | 766 | 53.5 | 768 | 53.7 | 770 | 53.8 | 773 | 54.0 | 775 | 54.2 | 777 |
| 1 436 | 53.3 | 766 | 53.5 | 768 | 53.6 | 770 | 53.8 | 772 | 53.9 | 775 | 54.1 | 777 | 54.3 | 779 |
| 1 437 | 53.4 | 767 | 53.6 | 770 | 53.7 | 772 | 53.9 | 774 | 54.0 | 777 | 54.2 | 779 | 54.4 | 781 |
| 1 438 | 53.5 | 769 | 53.7 | 772 | 53.8 | 774 | 54.0 | 776 | 54.1 | 779 | 54.3 | 781 | 54.5 | 783 |
| 1 439 | 53.6 | 771 | 53.8 | 774 | 53.9 | 776 | 54.1 | 778 | 54.2 | 780 | 54.4 | 783 | 54.5 | 785 |
| 1 440 | 53.7 | 773 | 53.9 | 776 | 54.0 | 778 | 54.2 | 780 | 54.3 | 782 | 54.5 | 785 | 54.6 | 787 |
| 1 441 | 53.8 | 775 | 54.0 | 778 | 54.1 | 780 | 54.3 | 782 | 54.4 | 784 | 54.6 | 786 | 54.7 | 789 |
| 1 442 | 53.9 | 777 | 54.1 | 780 | 54.2 | 782 | 54.4 | 784 | 54.5 | 786 | 54.7 | 788 | 54.8 | 790 |
| 1 443 | 54.0 | 779 | 54.2 | 782 | 54.3 | 784 | 54.5 | 786 | 54.6 | 788 | 54.8 | 790 | 54.9 | 793 |
| 1 444 | 54.1 | 781 | 54.3 | 783 | 54.4 | 786 | 54.6 | 788 | 54.7 | 790 | 54.9 | 792 | 55.0 | 795 |
| 1 445 | 54.2 | 783 | 54.3 | 785 | 54.5 | 788 | 54.7 | 790 | 54.8 | 792 | 55.0 | 794 | 55.1 | 797 |
| 1 446 | 54.3 | 785 | 54.4 | 787 | 54.6 | 790 | 54.8 | 792 | 54.9 | 794 | 55.1 | 796 | 55.2 | 799 |
| 1 447 | 54.4 | 787 | 54.5 | 789 | 54.7 | 791 | 54.8 | 794 | 55.0 | 796 | 55.2 | 799 | 55.3 | 801 |
| 1 448 | 54.5 | 789 | 54.6 | 791 | 54.8 | 793 | 54.9 | 796 | 55.1 | 798 | 55.3 | 800 | 55.4 | 802 |
| 1 449 | 54.6 | 791 | 54.7 | 793 | 54.9 | 795 | 55.0 | 798 | 55.2 | 800 | 55.4 | 802 | 55.5 | 804 |
| 1 450 | 54.7 | 793 | 54.8 | 795 | 55.0 | 797 | 55.1 | 800 | 55.3 | 802 | 55.5 | 804 | 55.6 | 806 |
| 1 451 | 54.8 | 795 | 54.9 | 797 | 55.1 | 799 | 55.2 | 801 | 55.4 | 804 | 55.5 | 806 | 55.7 | 808 |
| 1 452 | 54.9 | 796 | 55.0 | 799 | 55.2 | 801 | 55.3 | 803 | 55.5 | 806 | 55.6 | 808 | 55.8 | 810 |
| 1 453 | 55.0 | 798 | 55.1 | 801 | 55.3 | 803 | 55.4 | 805 | 55.6 | 808 | 55.7 | 810 | 55.9 | 812 |
| 1 454 | 55.0 | 800 | 55.2 | 803 | 55.4 | 805 | 55.5 | 807 | 55.7 | 810 | 55.8 | 812 | 56.0 | 814 |
| 1 455 | 55.1 | 802 | 55.3 | 805 | 55.5 | 807 | 55.6 | 809 | 55.8 | 812 | 55.9 | 814 | 56.1 | 816 |
| 1 456 | 55.2 | 804 | 55.4 | 807 | 55.6 | 809 | 55.7 | 811 | 55.9 | 814 | 56.0 | 816 | 56.2 | 818 |
| 1 457 | 55.3 | 806 | 55.5 | 808 | 55.7 | 811 | 55.8 | 813 | 56.0 | 815 | 56.1 | 818 | 56.3 | 820 |
| 1 458 | 55.4 | 808 | 55.6 | 811 | 55.8 | 813 | 55.9 | 815 | 56.1 | 818 | 56.2 | 820 | 56.4 | 822 |
| 1 459 | 55.5 | 810 | 55.7 | 812 | 55.8 | 815 | 56.0 | 817 | 56.2 | 819 | 56.3 | 822 | 56.5 | 824 |
| 1 460 | 55.6 | 812 | 55.8 | 814 | 55.9 | 817 | 56.3 | 819 | 56.5 | 821 | 56.4 | 824 | 56.6 | 836 |
| 1 461 | 55.7 | 814 | 55.9 | 816 | 56.0 | 819 | 56.2 | 821 | 56.4 | 823 | 56.5 | 825 | 56.7 | 828 |
| 1 462 | 55.8 | 816 | 56.0 | 818 | 56.1 | 821 | 56.3 | 823 | 56.4 | 825 | 56.6 | 837 | 56.7 | 830 |
| 1 463 | 55.9 | 818 | 56.1 | 820 | 56.2 | 823 | 56.4 | 825 | 56.5 | 827 | 56.7 | 829 | 56.9 | 832 |
| 1 464 | 56.0 | 820 | 56.2 | 822 | 56.3 | 825 | 56.5 | 827 | 56.6 | 829 | 56.8 | 831 | 56.9 | 834 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 53.7 | 768 | 53.9 | 770 | 54.0 | 772 | 54.2 | 775 | 54.4 | 777 | 54.5 | 779 | 54.7 | 781 | 54.8 | 783 | 55.0 | 786 | **1 429** |
| 53.8 | 770 | 54.0 | 772 | 54.1 | 774 | 54.3 | 776 | 54.5 | 779 | 54.6 | 781 | 54.8 | 783 | 54.9 | 785 | 55.1 | 788 | **1 430** |
| 53.9 | 772 | 54.1 | 774 | 54.2 | 776 | 54.4 | 778 | 54.5 | 781 | 54.7 | 783 | 54.9 | 785 | 55.0 | 787 | 55.2 | 789 | **1 431** |
| 54.0 | 774 | 54.2 | 776 | 54.3 | 778 | 54.5 | 780 | 54.6 | 783 | 54.8 | 785 | 55.0 | 787 | 55.1 | 789 | 55.3 | 791 | **1 432** |
| 54.1 | 776 | 54.3 | 778 | 54.4 | 780 | 54.6 | 782 | 54.7 | 784 | 54.9 | 787 | 55.1 | 789 | 55.2 | 791 | 55.4 | 793 | **1 433** |
| 54.2 | 777 | 54.4 | 780 | 54.5 | 782 | 54.7 | 784 | 54.8 | 786 | 55.0 | 789 | 55.2 | 791 | 55.3 | 793 | 55.5 | 795 | **1 434** |
| 54.3 | 779 | 54.5 | 782 | 54.6 | 784 | 54.8 | 786 | 54.9 | 788 | 55.1 | 791 | 55.3 | 793 | 55.4 | 795 | 55.6 | 797 | **1 435** |
| 54.4 | 781 | 54.6 | 784 | 54.7 | 786 | 54.9 | 788 | 55.0 | 790 | 55.2 | 793 | 55.4 | 795 | 55.5 | 797 | 55.7 | 799 | **1 436** |
| 54.5 | 783 | 54.7 | 785 | 54.8 | 788 | 55.0 | 790 | 55.1 | 792 | 55.3 | 795 | 55.4 | 797 | 55.6 | 799 | 55.7 | 801 | **1 437** |
| 54.6 | 785 | 54.8 | 787 | 54.9 | 790 | 55.1 | 792 | 55.2 | 794 | 55.4 | 797 | 55.5 | 799 | 55.7 | 801 | 55.8 | 803 | **1 438** |
| 54.7 | 787 | 54.9 | 789 | 55.0 | 792 | 55.2 | 794 | 55.3 | 796 | 55.5 | 799 | 55.6 | 801 | 55.8 | 803 | 55.9 | 805 | **1 439** |
| 54.8 | 789 | 55.0 | 791 | 55.1 | 794 | 55.3 | 796 | 55.4 | 798 | 55.6 | 800 | 55.7 | 803 | 55.9 | 805 | 56.0 | 807 | **1 440** |
| 54.9 | 791 | 55.1 | 793 | 55.2 | 796 | 55.4 | 798 | 55.5 | 800 | 55.7 | 802 | 55.8 | 805 | 56.0 | 807 | 56.1 | 809 | **1 441** |
| 55.0 | 793 | 55.2 | 795 | 55.3 | 798 | 55.5 | 800 | 55.6 | 802 | 55.8 | 804 | 55.9 | 807 | 56.1 | 809 | 56.2 | 811 | **1 442** |
| 55.1 | 795 | 55.3 | 797 | 55.4 | 800 | 55.6 | 802 | 55.7 | 804 | 55.9 | 806 | 56.0 | 809 | 56.2 | 811 | 56.3 | 813 | **1 443** |
| 55.2 | 797 | 55.3 | 799 | 55.5 | 801 | 55.7 | 804 | 55.8 | 806 | 56.0 | 808 | 56.1 | 810 | 56.3 | 813 | 56.4 | 815 | **1 444** |
| 55.3 | 799 | 55.4 | 801 | 55.6 | 803 | 55.8 | 806 | 55.9 | 808 | 56.1 | 810 | 56.2 | 812 | 56.4 | 814 | 56.5 | 817 | **1 445** |
| 55.4 | 801 | 55.5 | 803 | 55.7 | 805 | 55.9 | 808 | 56.0 | 810 | 56.2 | 812 | 56.3 | 814 | 56.5 | 816 | 56.6 | 819 | **1 446** |
| 55.5 | 803 | 55.6 | 805 | 55.8 | 807 | 56.0 | 810 | 56.1 | 812 | 56.3 | 814 | 56.4 | 816 | 56.6 | 818 | 56.7 | 821 | **1 447** |
| 55.6 | 805 | 55.7 | 807 | 55.9 | 809 | 56.0 | 812 | 56.2 | 814 | 56.4 | 816 | 56.5 | 818 | 56.7 | 820 | 56.8 | 823 | **1 448** |
| 55.7 | 807 | 55.8 | 809 | 56.0 | 811 | 56.1 | 813 | 56.3 | 816 | 56.5 | 818 | 56.6 | 820 | 56.8 | 822 | 56.9 | 824 | **1 449** |
| 55.8 | 809 | 55.9 | 811 | 56.1 | 813 | 56.2 | 815 | 56.4 | 818 | 56.5 | 820 | 56.7 | 822 | 56.8 | 824 | 57.0 | 827 | **1 450** |
| 55.9 | 811 | 56.0 | 813 | 56.2 | 815 | 56.3 | 817 | 56.5 | 820 | 56.6 | 822 | 56.8 | 824 | 56.9 | 826 | 57.1 | 829 | **1 451** |
| 56.0 | 813 | 56.1 | 815 | 56.3 | 817 | 56.4 | 819 | 56.6 | 822 | 56.7 | 824 | 56.9 | 826 | 57.0 | 828 | 57.2 | 830 | **1 452** |
| 56.1 | 815 | 56.2 | 817 | 56.4 | 819 | 56.5 | 821 | 56.7 | 823 | 56.8 | 826 | 57.0 | 828 | 57.1 | 830 | 57.3 | 832 | **1 453** |
| 56.2 | 816 | 56.3 | 819 | 56.5 | 821 | 56.6 | 823 | 56.8 | 825 | 56.9 | 828 | 57.1 | 830 | 57.2 | 832 | 57.4 | 834 | **1 454** |
| 56.2 | 818 | 56.4 | 821 | 56.6 | 823 | 56.7 | 825 | 56.9 | 827 | 57.0 | 830 | 57.2 | 832 | 57.3 | 834 | 57.5 | 836 | **1 455** |
| 56.3 | 820 | 56.5 | 822 | 56.7 | 825 | 56.8 | 827 | 57.0 | 829 | 57.1 | 832 | 57.3 | 834 | 57.4 | 836 | 57.6 | 838 | **1 456** |
| 56.4 | 822 | 56.6 | 825 | 56.8 | 827 | 56.9 | 829 | 57.1 | 831 | 57.2 | 834 | 57.4 | 836 | 57.5 | 838 | 57.7 | 840 | **1 457** |
| 56.5 | 824 | 56.7 | 826 | 56.8 | 829 | 57.0 | 831 | 57.2 | 833 | 57.3 | 836 | 57.5 | 838 | 57.6 | 840 | 57.8 | 842 | **1 458** |
| 56.6 | 826 | 56.8 | 828 | 56.9 | 831 | 57.1 | 833 | 57.2 | 835 | 57.4 | 838 | 57.6 | 840 | 57.7 | 842 | 57.9 | 844 | **1 459** |
| 56.7 | 828 | 56.9 | 830 | 57.0 | 833 | 57.2 | 835 | 57.3 | 837 | 57.5 | 840 | 57.7 | 842 | 57.8 | 844 | 58.0 | 846 | **1 460** |
| 56.8 | 830 | 57.0 | 832 | 57.1 | 835 | 57.3 | 837 | 57.4 | 839 | 57.6 | 842 | 57.7 | 844 | 57.9 | 846 | 58.1 | 848 | **1 461** |
| 56.9 | 832 | 57.1 | 834 | 57.2 | 837 | 57.4 | 839 | 57.5 | 841 | 57.7 | 844 | 57.8 | 846 | 58.0 | 848 | 58.2 | 850 | **1 462** |
| 57.0 | 834 | 57.2 | 836 | 57.3 | 839 | 57.5 | 841 | 57.6 | 843 | 57.8 | 845 | 57.9 | 848 | 58.1 | 850 | 58.2 | 852 | **1 463** |
| 57.1 | 836 | 57.3 | 838 | 57.4 | 841 | 57.6 | 843 | 57.7 | 845 | 57.9 | 848 | 58.0 | 850 | 58.2 | 852 | 58.3 | 854 | **1 464** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 465 | 56.1 | 822 | 56.3 | 824 | 56.4 | 827 | 56.6 | 829 | 56.7 | 831 | 56.9 | 833 | 57.0 | 836 |
| 1 466 | 56.2 | 824 | 56.3 | 826 | 56.5 | 828 | 56.7 | 831 | 56.8 | 833 | 57.0 | 835 | 57.1 | 838 |
| 1 467 | 56.3 | 826 | 56.4 | 828 | 56.6 | 830 | 56.8 | 833 | 56.9 | 835 | 57.1 | 837 | 57.2 | 840 |
| 1 468 | 56.4 | 828 | 56.5 | 830 | 56.7 | 832 | 56.9 | 835 | 57.0 | 837 | 57.2 | 839 | 57.3 | 841 |
| 1 469 | 56.5 | 830 | 56.6 | 832 | 56.8 | 834 | 57.0 | 837 | 57.1 | 839 | 57.3 | 841 | 57.4 | 843 |
| 1 470 | 56.6 | 832 | 56.7 | 834 | 56.9 | 836 | 57.0 | 839 | 57.2 | 841 | 57.4 | 843 | 57.5 | 845 |
| 1 471 | 56.7 | 833 | 56.8 | 836 | 57.0 | 838 | 57.1 | 841 | 57.3 | 843 | 57.5 | 845 | 57.6 | 847 |
| 1 472 | 56.8 | 835 | 56.9 | 838 | 57.1 | 840 | 57.2 | 842 | 57.4 | 845 | 57.5 | 847 | 57.7 | 849 |
| 1 473 | 56.8 | 837 | 57.0 | 840 | 57.2 | 842 | 57.3 | 844 | 57.5 | 847 | 57.6 | 849 | 57.8 | 851 |
| 1 474 | 56.9 | 839 | 57.1 | 842 | 57.3 | 844 | 57.4 | 846 | 57.6 | 849 | 57.7 | 851 | 57.9 | 853 |
| 1 475 | 57.0 | 841 | 57.2 | 844 | 57.4 | 846 | 57.5 | 848 | 57.7 | 851 | 57.8 | 853 | 58.0 | 855 |
| 1 476 | 57.1 | 843 | 57.3 | 846 | 57.5 | 848 | 57.6 | 850 | 57.8 | 853 | 57.9 | 855 | 58.1 | 857 |
| 1 477 | 57.2 | 845 | 57.4 | 848 | 57.6 | 850 | 57.7 | 852 | 57.9 | 855 | 58.0 | 857 | 58.2 | 859 |
| 1 478 | 57.3 | 847 | 57.5 | 850 | 57.7 | 852 | 57.8 | 854 | 58.0 | 857 | 58.1 | 859 | 58.3 | 861 |
| 1 479 | 57.4 | 849 | 57.6 | 852 | 57.7 | 854 | 57.9 | 856 | 58.1 | 859 | 58.2 | 861 | 58.4 | 863 |
| 1 480 | 57.5 | 851 | 57.7 | 854 | 57.8 | 856 | 58.0 | 858 | 58.2 | 861 | 58.3 | 863 | 58.5 | 865 |
| 1 481 | 57.6 | 853 | 57.8 | 856 | 57.9 | 858 | 58.1 | 860 | 58.2 | 863 | 58.4 | 865 | 58.5 | 867 |
| 1 482 | 51.7 | 855 | 57.9 | 857 | 58.0 | 860 | 58.2 | 862 | 58.3 | 864 | 58.5 | 867 | 58.6 | 869 |
| 1 483 | 57.8 | 857 | 58.0 | 859 | 58.1 | 862 | 58.3 | 864 | 58.4 | 867 | 58.6 | 869 | 58.7 | 871 |
| 1 484 | 57.9 | 859 | 58.0 | 861 | 58.2 | 864 | 58.4 | 866 | 58.5 | 868 | 58.7 | 871 | 58.8 | 873 |
| 1 485 | 58.0 | 861 | 58.1 | 863 | 58.3 | 866 | 58.5 | 868 | 58.6 | 871 | 58.8 | 873 | 58.9 | 875 |
| 1 486 | 58.1 | 863 | 58.2 | 865 | 58.4 | 868 | 58.6 | 870 | 58.7 | 872 | 58.9 | 875 | 59.0 | 877 |
| 1 487 | 58.2 | 865 | 58.3 | 867 | 58.5 | 870 | 58.6 | 872 | 58.8 | 874 | 59.0 | 877 | 59.1 | 879 |
| 1 488 | 58.3 | 867 | 58.4 | 869 | 58.6 | 872 | 58.7 | 874 | 58.9 | 876 | 59.0 | 879 | 59.2 | 881 |
| 1 489 | 58.4 | 869 | 58.5 | 871 | 58.7 | 874 | 58.8 | 876 | 59.0 | 878 | 59.1 | 881 | 59.3 | 883 |
| 1 490 | 58.4 | 871 | 58.6 | 873 | 58.8 | 876 | 58.9 | 878 | 59.1 | 880 | 59.2 | 883 | 59.4 | 885 |
| 1 491 | 58.5 | 873 | 58.7 | 875 | 58.9 | 878 | 59.0 | 880 | 59.2 | 882 | 59.3 | 884 | 59.5 | 887 |
| 1 492 | 58.6 | 875 | 58.8 | 877 | 59.0 | 880 | 59.1 | 882 | 59.3 | 884 | 59.4 | 887 | 59.6 | 889 |
| 1 493 | 58.7 | 877 | 58.9 | 879 | 59.0 | 882 | 59.2 | 884 | 59.4 | 886 | 59.5 | 888 | 59.7 | 891 |
| 1 494 | 58.8 | 879 | 59.0 | 881 | 59.1 | 884 | 59.3 | 886 | 59.4 | 888 | 59.6 | 890 | 59.8 | 893 |
| 1 495 | 58.9 | 881 | 59.1 | 883 | 59.2 | 885 | 59.4 | 888 | 59.5 | 890 | 59.7 | 892 | 59.9 | 895 |
| 1 496 | 59.0 | 883 | 59.2 | 885 | 59.3 | 888 | 59.5 | 890 | 59.6 | 892 | 59.8 | 894 | 59.9 | 897 |
| 1 497 | 59.1 | 885 | 59.3 | 887 | 59.4 | 890 | 59.6 | 892 | 59.7 | 894 | 59.9 | 896 | 60.0 | 899 |
| 1 498 | 59.2 | 887 | 59.4 | 889 | 59.5 | 891 | 59.7 | 894 | 59.8 | 896 | 60.0 | 898 | 60.1 | 901 |
| 1 499 | 59.3 | 889 | 59.5 | 891 | 59.6 | 894 | 59.8 | 896 | 59.9 | 898 | 60.1 | 900 | 60.2 | 903 |
| 1 500 | 59.4 | 891 | 59.5 | 893 | 59.7 | 896 | 59.9 | 898 | 60.0 | 900 | 60.2 | 902 | 60.3 | 905 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 57.2 | 838 | 57.4 | 840 | 57.5 | 843 | 57.7 | 845 | 57.8 | 847 | 58.0 | 849 | 58.1 | 852 | 58.3 | 854 | 58.4 | 856 | **1 465** |
| 57.3 | 840 | 57.4 | 842 | 57.6 | 845 | 57.8 | 847 | 57.9 | 849 | 58.1 | 851 | 58.2 | 854 | 58.4 | 856 | 58.5 | 858 | **1 466** |
| 57.4 | 842 | 57.5 | 844 | 57.7 | 846 | 57.9 | 849 | 58.0 | 851 | 58.2 | 853 | 58.3 | 856 | 58.5 | 858 | 58.6 | 860 | **1 467** |
| 57.5 | 844 | 57.6 | 846 | 57.8 | 849 | 58.0 | 851 | 58.1 | 853 | 58.3 | 855 | 58.4 | 858 | 58.6 | 860 | 58.7 | 862 | **1 468** |
| 57.6 | 846 | 57.7 | 848 | 57.9 | 850 | 58.0 | 853 | 58.2 | 855 | 58.4 | 857 | 58.5 | 860 | 58.7 | 862 | 58.8 | 864 | **1 469** |
| 57.7 | 848 | 57.8 | 850 | 58.0 | 852 | 58.1 | 855 | 58.3 | 857 | 58.5 | 859 | 58.6 | 862 | 58.8 | 864 | 58.9 | 866 | **1 470** |
| 57.8 | 850 | 57.9 | 852 | 58.1 | 854 | 58.2 | 857 | 58.4 | 859 | 58.5 | 861 | 58.7 | 863 | 58.9 | 866 | 59.0 | 868 | **1 471** |
| 57.9 | 852 | 58.0 | 854 | 58.2 | 856 | 58.3 | 859 | 58.5 | 861 | 58.6 | 863 | 58.8 | 866 | 58.9 | 868 | 59.1 | 870 | **1 472** |
| 57.9 | 854 | 58.1 | 856 | 58.3 | 858 | 58.4 | 861 | 58.6 | 863 | 58.7 | 865 | 58.9 | 867 | 59.0 | 870 | 59.2 | 572 | **1 473** |
| 58.0 | 856 | 58.2 | 858 | 58.4 | 860 | 58.5 | 863 | 58.7 | 865 | 58.8 | 867 | 59.0 | 870 | 59.1 | 872 | 59.3 | 874 | **1 474** |
| 58.1 | 858 | 58.3 | 860 | 58.5 | 862 | 58.6 | 864 | 58.8 | 867 | 58.9 | 869 | 59.1 | 871 | 59.2 | 874 | 59.4 | 876 | **1 475** |
| 58.2 | 860 | 58.4 | 862 | 58.6 | 864 | 58.7 | 867 | 58.9 | 869 | 59.0 | 871 | 59.2 | 873 | 59.3 | 876 | 59.5 | 878 | **1 476** |
| 58.3 | 862 | 58.5 | 864 | 58.6 | 866 | 58.8 | 868 | 59.0 | 871 | 59.1 | 873 | 59.3 | 875 | 59.4 | 878 | 59.6 | 880 | **1 477** |
| 58.4 | 864 | 58.6 | 866 | 58.7 | 868 | 58.9 | 871 | 59.1 | 873 | 59.2 | 875 | 59.4 | 877 | 59.5 | 880 | 59.7 | 882 | **1 478** |
| 58.5 | 866 | 58.7 | 868 | 58.8 | 870 | 59.0 | 872 | 59.1 | 875 | 59.3 | 877 | 59.5 | 879 | 59.6 | 881 | 59.8 | 884 | **1 479** |
| 58.6 | 867 | 58.8 | 870 | 58.9 | 872 | 59.1 | 874 | 59.2 | 877 | 59.4 | 879 | 59.5 | 881 | 59.7 | 883 | 59.9 | 886 | **1 480** |
| 58.7 | 869 | 58.9 | 872 | 59.0 | 874 | 59.2 | 876 | 59.3 | 879 | 59.5 | 881 | 59.6 | 883 | 59.8 | 885 | 59.9 | 888 | **1 481** |
| 58.8 | 871 | 59.0 | 874 | 59.1 | 876 | 59.3 | 878 | 59.4 | 881 | 59.6 | 883 | 59.7 | 885 | 59.9 | 887 | 60.0 | 890 | **1 482** |
| 58.9 | 873 | 59.1 | 876 | 59.2 | 878 | 59.4 | 880 | 59.5 | 883 | 59.7 | 885 | 59.8 | 887 | 60.0 | 889 | 60.1 | 892 | **1 483** |
| 59.0 | 875 | 59.1 | 878 | 59.3 | 880 | 59.5 | 882 | 59.6 | 885 | 59.8 | 887 | 59.9 | 889 | 60.1 | 891 | 60.2 | 894 | **1 484** |
| 59.1 | 877 | 59.2 | 880 | 59.4 | 882 | 59.6 | 884 | 59.7 | 887 | 59.8 | 889 | 60.0 | 891 | 60.2 | 893 | 60.3 | 896 | **1 485** |
| 59.2 | 879 | 59.3 | 882 | 59.5 | 884 | 59.6 | 886 | 59.8 | 888 | 59.9 | 891 | 60.1 | 893 | 60.3 | 895 | 60.4 | 898 | **1 486** |
| 59.3 | 881 | 59.4 | 884 | 59.6 | 886 | 59.7 | 888 | 59.9 | 891 | 60.0 | 893 | 60.2 | 895 | 60.3 | 897 | 60.5 | 900 | **1 487** |
| 59.4 | 883 | 59.5 | 886 | 59.7 | 888 | 59.8 | 890 | 60.0 | 893 | 60.1 | 895 | 60.3 | 897 | 60.4 | 899 | 60.6 | 902 | **1 488** |
| 59.5 | 885 | 59.6 | 888 | 59.8 | 890 | 59.9 | 892 | 60.1 | 895 | 60.2 | 897 | 60.4 | 899 | 60.5 | 901 | 60.7 | 904 | **1 489** |
| 59.5 | 887 | 59.7 | 890 | 59.9 | 892 | 60.0 | 894 | 60.2 | 897 | 60.3 | 899 | 60.5 | 901 | 60.6 | 903 | 60.8 | 906 | **1 490** |
| 59.6 | 889 | 59.8 | 892 | 60.0 | 894 | 60.1 | 896 | 60.3 | 898 | 60.4 | 901 | 60.6 | 903 | 60.7 | 905 | 60.9 | 908 | **1 491** |
| 59.7 | 891 | 59.9 | 894 | 60.0 | 896 | 60.2 | 899 | 60.4 | 900 | 60.5 | 903 | 60.7 | 905 | 60.8 | 907 | 61.0 | 910 | **1 492** |
| 59.8 | 893 | 60.0 | 896 | 60.1 | 898 | 60.3 | 900 | 60.4 | 903 | 60.6 | 905 | 60.8 | 907 | 60.9 | 910 | 61.1 | 912 | **1 493** |
| 59.9 | 895 | 60.1 | 897 | 60.2 | 900 | 60.4 | 902 | 60.5 | 904 | 60.7 | 907 | 60.8 | 909 | 61.0 | 911 | 61.2 | 914 | **1 494** |
| 60.0 | 897 | 60.2 | 900 | 60.3 | 902 | 60.5 | 904 | 60.6 | 906 | 60.8 | 909 | 60.9 | 911 | 61.1 | 913 | 61.2 | 916 | **1 495** |
| 60.1 | 899 | 60.3 | 901 | 60.4 | 904 | 60.6 | 906 | 60.7 | 909 | 60.9 | 911 | 61.0 | 913 | 61.2 | 915 | 61.3 | 918 | **1 496** |
| 60.2 | 901 | 60.4 | 903 | 60.5 | 906 | 60.7 | 908 | 60.8 | 910 | 61.0 | 913 | 61.1 | 915 | 61.3 | 917 | 61.4 | 920 | **1 497** |
| 60.3 | 903 | 60.4 | 905 | 60.6 | 908 | 60.8 | 910 | 60.9 | 912 | 61.1 | 915 | 61.2 | 917 | 61.4 | 919 | 61.5 | 922 | **1 498** |
| 60.4 | 905 | 60.5 | 907 | 60.7 | 910 | 60.9 | 912 | 61.0 | 915 | 61.2 | 917 | 61.3 | 919 | 61.5 | 921 | 61.6 | 924 | **1 499** |
| 60.5 | 907 | 60.6 | 909 | 60.8 | 912 | 60.9 | 914 | 61.1 | 917 | 61.2 | 919 | 61.4 | 921 | 61.6 | 923 | 61.7 | 926 | **1 500** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 501 | 59.5 | 893 | 59.6 | 895 | 59.8 | 897 | 59.9 | 900 | 60.1 | 902 | 60.3 | 904 | 60.4 | 907 |
| 1 502 | 59.6 | 895 | 59.7 | 897 | 59.9 | 900 | 60.0 | 902 | 60.2 | 904 | 60.3 | 906 | 60.5 | 909 |
| 1 503 | 59.7 | 897 | 59.8 | 899 | 60.0 | 901 | 60.1 | 904 | 60.3 | 906 | 60.4 | 908 | 60.6 | 911 |
| 1 504 | 59.8 | 899 | 59.9 | 901 | 60.1 | 903 | 60.2 | 906 | 60.4 | 908 | 60.5 | 910 | 60.7 | 913 |
| 1 505 | 59.8 | 901 | 60.0 | 903 | 60.2 | 905 | 60.3 | 908 | 60.5 | 910 | 60.6 | 912 | 60.8 | 915 |
| 1 806 | 59.9 | 903 | 60.1 | 905 | 60.3 | 907 | 60.4 | 910 | 60.5 | 912 | 60.7 | 914 | 60.9 | 917 |
| 1 507 | 60.0 | 905 | 60.2 | 907 | 60.3 | 909 | 60.5 | 912 | 60.6 | 914 | 60.8 | 916 | 61.0 | 919 |
| 1 508 | 60.1 | 907 | 60.3 | 909 | 60.4 | 911 | 60.6 | 914 | 60.7 | 916 | 60.9 | 918 | 61.1 | 921 |
| 1 509 | 60.2 | 909 | 60.4 | 911 | 60.5 | 913 | 60.7 | 916 | 60.8 | 918 | 61.0 | 920 | 61.1 | 923 |
| 1 510 | 60.3 | 911 | 60.5 | 913 | 60.6 | 915 | 60.8 | 918 | 60.9 | 920 | 61.1 | 922 | 61.2 | 925 |
| 1 511 | 60.4 | 912 | 60.6 | 915 | 60.7 | 917 | 60.9 | 920 | 61.0 | 922 | 61.2 | 924 | 61.3 | 927 |
| 1 512 | 60.5 | 914 | 60.7 | 917 | 60.8 | 919 | 61.0 | 922 | 61.1 | 924 | 61.3 | 926 | 61.4 | 929 |
| 1 513 | 60.6 | 916 | 60.7 | 919 | 60.9 | 921 | 61.1 | 924 | 61.2 | 926 | 61.4 | 928 | 61.5 | 931 |
| 1 514 | 60.7 | 918 | 60.8 | 921 | 61.0 | 923 | 61.1 | 926 | 61.3 | 928 | 61.5 | 930 | 61.6 | 933 |
| 1 515 | 60.8 | 920 | 60.9 | 923 | 61.1 | 925 | 61.2 | 928 | 61.4 | 930 | 61.5 | 932 | 61.7 | 935 |
| 1 516 | 60.8 | 922 | 61.0 | 925 | 61.2 | 927 | 61.3 | 930 | 61.5 | 932 | 61.6 | 934 | 61.8 | 937 |
| 1 517 | 60.9 | 924 | 61.1 | 927 | 61.3 | 929 | 61.4 | 932 | 61.6 | 934 | 61.7 | 936 | 61.9 | 939 |
| 1 518 | 61.0 | 926 | 61.2 | 929 | 61.3 | 931 | 61.5 | 934 | 61.7 | 936 | 61.8 | 938 | 62.0 | 941 |
| 1 519 | 61.1 | 928 | 61.3 | 931 | 61.4 | 933 | 61.6 | 936 | 61.7 | 938 | 61.9 | 940 | 62.1 | 943 |
| 1 520 | 61.2 | 930 | 61.4 | 933 | 61.5 | 935 | 61.7 | 938 | 61.8 | 940 | 62.0 | 942 | 62.2 | 945 |
| 1 521 | 61.3 | 932 | 61.5 | 935 | 61.6 | 937 | 61.8 | 940 | 61.9 | 942 | 62.1 | 944 | 62.2 | 947 |
| 1 522 | 61.4 | 934 | 61.6 | 937 | 61.7 | 939 | 61.9 | 942 | 62.0 | 944 | 62.2 | 946 | 62.3 | 949 |
| 1 523 | 61.5 | 936 | 61.6 | 939 | 61.8 | 941 | 62.0 | 944 | 62.1 | 946 | 62.3 | 948 | 62.4 | 951 |
| 1 524 | 61.6 | 938 | 61.7 | 941 | 61.9 | 943 | 62.0 | 946 | 62.2 | 948 | 62.4 | 950 | 62.5 | 953 |
| 1 525 | 61.7 | 940 | 61.8 | 943 | 62.0 | 945 | 62.1 | 948 | 62.3 | 950 | 62.5 | 952 | 62.6 | 955 |
| 1 526 | 61.8 | 942 | 61.9 | 945 | 62.1 | 947 | 62.2 | 950 | 62.4 | 952 | 62.5 | 954 | 62.7 | 957 |
| 1 527 | 61.8 | 944 | 62.0 | 947 | 62.2 | 949 | 62.3 | 952 | 62.5 | 954 | 62.6 | 957 | 62.8 | 959 |
| 1 528 | 61.9 | 946 | 62.1 | 949 | 62.3 | 951 | 62.4 | 954 | 62.6 | 956 | 62.7 | 959 | 62.9 | 961 |
| 1 529 | 62.0 | 948 | 62.2 | 951 | 62.3 | 953 | 62.5 | 956 | 62.7 | 958 | 62.8 | 961 | 63.0 | 963 |
| 1 530 | 62.1 | 950 | 62.3 | 953 | 62.4 | 955 | 62.6 | 958 | 62.8 | 960 | 62.9 | 963 | 63.1 | 965 |
| 1 531 | 62.2 | 952 | 62.4 | 955 | 62.5 | 957 | 62.7 | 960 | 62.8 | 962 | 63.0 | 965 | 63.2 | 967 |
| 1 532 | 62.3 | 954 | 62.5 | 957 | 62.6 | 959 | 62.8 | 962 | 62.9 | 964 | 63.1 | 967 | 63.2 | 969 |
| 1 533 | 62.4 | 956 | 62.5 | 959 | 62.7 | 961 | 62.9 | 964 | 63.0 | 966 | 63.2 | 969 | 63.3 | 971 |
| 1 534 | 62.5 | 958 | 62.6 | 961 | 62.8 | 963 | 63.0 | 966 | 63.1 | 968 | 63.3 | 971 | 63.4 | 973 |
| 1 535 | 62.6 | 960 | 62.7 | 963 | 62.9 | 965 | 63.0 | 968 | 63.2 | 970 | 63.4 | 973 | 63.5 | 975 |
| 1 536 | 62.7 | 962 | 62.8 | 965 | 63.0 | 967 | 63.1 | 970 | 63.3 | 972 | 63.5 | 975 | 63.6 | 977 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 60.6 | 909 | 60.7 | 911 | 60.9 | 914 | 61.0 | 916 | 61.2 | 918 | 61.3 | 921 | 61.5 | 923 | 61.7 | 925 | 61.8 | 928 | **1 501** |
| 60.7 | 911 | 60.8 | 913 | 61.0 | 916 | 61.1 | 918 | 61.3 | 920 | 61.4 | 923 | 61.6 | 925 | 61.7 | 927 | 61.9 | 930 | **1 502** |
| 60.8 | 913 | 60.9 | 915 | 61.1 | 918 | 61.2 | 920 | 61.4 | 922 | 61.5 | 925 | 61.7 | 927 | 61.8 | 929 | 62.0 | 932 | **1 503** |
| 60.8 | 915 | 61.0 | 917 | 61.2 | 920 | 61.3 | 922 | 61.5 | 925 | 61.6 | 927 | 61.8 | 929 | 61.9 | 931 | 62.1 | 934 | **1 504** |
| 60.9 | 917 | 61.1 | 919 | 61.2 | 922 | 61.4 | 924 | 61.6 | 926 | 61.7 | 929 | 61.9 | 931 | 62.0 | 933 | 62.2 | 936 | **1 505** |
| 61.0 | 919 | 61.2 | 921 | 61.3 | 924 | 61.5 | 926 | 61.7 | 928 | 61.8 | 931 | 62.0 | 933 | 62.1 | 935 | 62.3 | 938 | **1 506** |
| 61.1 | 921 | 61.3 | 923 | 61.4 | 926 | 61.6 | 928 | 61.7 | 930 | 61.9 | 933 | 62.1 | 935 | 62.2 | 937 | 62.4 | 940 | **1 507** |
| 61.2 | 923 | 61.4 | 925 | 61.5 | 928 | 61.7 | 930 | 61.8 | 932 | 62.0 | 935 | 62.1 | 937 | 62.3 | 939 | 62.4 | 942 | **1 508** |
| 61.3 | 925 | 61.5 | 927 | 61.6 | 930 | 61.8 | 932 | 61.9 | 935 | 62.1 | 937 | 62.2 | 939 | 62.4 | 941 | 62.5 | 944 | **1 509** |
| 61.4 | 927 | 61.6 | 929 | 61.7 | 932 | 61.9 | 934 | 62.0 | 937 | 62.2 | 939 | 62.3 | 941 | 62.5 | 943 | 62.6 | 946 | **1 510** |
| 61.5 | 929 | 61.6 | 931 | 61.8 | 934 | 62.0 | 936 | 62.1 | 938 | 62.3 | 941 | 62.4 | 943 | 62.6 | 945 | 62.7 | 948 | **1 511** |
| 61.6 | 931 | 61.7 | 933 | 61.9 | 936 | 62.0 | 938 | 62.2 | 940 | 62.4 | 943 | 62.5 | 945 | 62.7 | 947 | 62.8 | 950 | **1 512** |
| 61.7 | 933 | 61.8 | 935 | 62.0 | 938 | 62.1 | 940 | 62.3 | 942 | 62.4 | 945 | 62.6 | 947 | 62.8 | 949 | 62.9 | 952 | **1 513** |
| 61.8 | 935 | 61.9 | 937 | 62.0 | 940 | 62.2 | 942 | 62.4 | 944 | 62.5 | 947 | 62.7 | 949 | 62.8 | 951 | 63.0 | 954 | **1 514** |
| 61.9 | 937 | 62.0 | 939 | 62.2 | 942 | 62.3 | 944 | 62.5 | 946 | 62.6 | 949 | 62.8 | 951 | 62.9 | 953 | 63.1 | 956 | **1 515** |
| 61.9 | 939 | 62.1 | 941 | 62.3 | 944 | 62.4 | 946 | 62.6 | 948 | 62.7 | 951 | 62.9 | 953 | 63.0 | 956 | 63.2 | 958 | **1 516** |
| 62.0 | 941 | 62.2 | 943 | 62.3 | 946 | 62.5 | 948 | 62.7 | 950 | 62.8 | 953 | 63.0 | 955 | 63.1 | 958 | 63.3 | 960 | **1 517** |
| 62.1 | 943 | 62.3 | 945 | 62.4 | 948 | 62.6 | 950 | 62.7 | 952 | 62.9 | 955 | 63.1 | 957 | 63.2 | 960 | 63.4 | 962 | **1 518** |
| 62.2 | 945 | 62.4 | 947 | 62.5 | 950 | 62.7 | 952 | 62.8 | 955 | 63.0 | 957 | 63.2 | 959 | 63.3 | 962 | 63.5 | 964 | **1 519** |
| 62.3 | 947 | 62.5 | 949 | 62.6 | 952 | 62.8 | 954 | 62.9 | 957 | 63.1 | 959 | 63.2 | 961 | 63.4 | 964 | 63.5 | 966 | **1 520** |
| 62.4 | 949 | 62.6 | 951 | 62.7 | 954 | 62.9 | 956 | 63.0 | 959 | 63.2 | 961 | 63.3 | 963 | 63.5 | 966 | 63.6 | 968 | **1 521** |
| 62.5 | 951 | 62.6 | 954 | 62.8 | 956 | 63.0 | 958 | 63.1 | 961 | 63.3 | 963 | 63.4 | 965 | 63.6 | 968 | 63.7 | 970 | **1 522** |
| 62.6 | 953 | 62.7 | 956 | 62.9 | 958 | 63.0 | 960 | 63.2 | 963 | 63.4 | 965 | 63.5 | 967 | 63.7 | 970 | 63.8 | 972 | **1 523** |
| 62.7 | 955 | 62.8 | 958 | 63.0 | 960 | 63.1 | 962 | 63.3 | 965 | 63.5 | 967 | 63.6 | 969 | 63.8 | 972 | 63.9 | 974 | **1 524** |
| 62.8 | 957 | 62.9 | 960 | 63.1 | 962 | 63.2 | 964 | 63.4 | 967 | 63.5 | 969 | 63.7 | 971 | 63.8 | 974 | 64.0 | 976 | **1 525** |
| 62.9 | 959 | 63.0 | 962 | 63.2 | 964 | 63.3 | 966 | 63.5 | 969 | 63.6 | 971 | 63.8 | 973 | 63.9 | 976 | 64.1 | 978 | **1 526** |
| 62.9 | 961 | 63.1 | 964 | 63.3 | 966 | 63.4 | 968 | 63.6 | 971 | 63.7 | 973 | 63.9 | 975 | 64.0 | 978 | 64.2 | 980 | **1 527** |
| 63.0 | 963 | 63.2 | 966 | 63.3 | 968 | 63.5 | 970 | 63.6 | 973 | 63.8 | 975 | 64.0 | 977 | 64.1 | 980 | 64.3 | 982 | **1 528** |
| 63.1 | 965 | 63.3 | 968 | 63.4 | 970 | 63.6 | 972 | 63.7 | 975 | 63.9 | 977 | 64.1 | 979 | 64.2 | 982 | 64.4 | 984 | **1 529** |
| 63.2 | 967 | 63.4 | 970 | 63.5 | 972 | 63.7 | 974 | 63.8 | 977 | 64.0 | 979 | 64.1 | 981 | 64.3 | 984 | 64.5 | 986 | **1 530** |
| 63.3 | 969 | 63.5 | 972 | 63.6 | 974 | 63.8 | 976 | 63.9 | 979 | 64.1 | 981 | 64.2 | 983 | 64.4 | 986 | 64.5 | 988 | **1 531** |
| 63.4 | 971 | 63.6 | 974 | 63.7 | 976 | 63.9 | 978 | 64.0 | 981 | 64.2 | 983 | 64.3 | 985 | 64.5 | 988 | 64.6 | 990 | **1 532** |
| 63.5 | 973 | 63.6 | 976 | 63.8 | 978 | 64.0 | 980 | 64.1 | 983 | 64.3 | 985 | 64.4 | 987 | 64.6 | 990 | 64.7 | 992 | **1 533** |
| 63.6 | 975 | 63.7 | 978 | 63.9 | 980 | 64.0 | 982 | 64.2 | 985 | 64.4 | 987 | 64.5 | 989 | 64.7 | 992 | 64.8 | 994 | **1 534** |
| 63.7 | 977 | 63.8 | 980 | 64.0 | 982 | 64.1 | 984 | 64.3 | 987 | 64.4 | 989 | 64.6 | 991 | 64.7 | 994 | 64.9 | 996 | **1 535** |
| 63.8 | 979 | 63.9 | 982 | 64.1 | 984 | 64.2 | 986 | 64.4 | 989 | 64.5 | 991 | 64.7 | 993 | 64.8 | 996 | 65.0 | 998 | **1 536** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 537 | 62.7 | 964 | 62.9 | 967 | 63.1 | 969 | 63.2 | 972 | 63.4 | 974 | 63.5 | 977 | 63.7 | 979 |
| 1 538 | 62.8 | 966 | 63.0 | 969 | 63.2 | 971 | 63.3 | 974 | 63.5 | 976 | 63.6 | 979 | 63.8 | 981 |
| 1 539 | 62.9 | 968 | 63.1 | 971 | 63.2 | 973 | 63.4 | 976 | 63.6 | 978 | 63.7 | 981 | 63.9 | 983 |
| 1 540 | 63.0 | 971 | 63.2 | 973 | 63.3 | 975 | 63.5 | 978 | 63.7 | 980 | 63.8 | 983 | 64.0 | 985 |
| 1 541 | 63.1 | 973 | 63.3 | 975 | 63.4 | 977 | 63.6 | 980 | 63.7 | 982 | 63.9 | 985 | 64.1 | 987 |
| 1 542 | 63.2 | 975 | 63.4 | 977 | 63.5 | 979 | 63.7 | 982 | 63.8 | 984 | 64.0 | 987 | 64.1 | 989 |
| 1 543 | 63.3 | 976 | 63.4 | 979 | 63.6 | 982 | 63.8 | 984 | 63.9 | 986 | 64.1 | 989 | 64.2 | 991 |
| 1 544 | 63.4 | 978 | 63.5 | 981 | 63.7 | 984 | 63.8 | 986 | 64.0 | 988 | 64.2 | 991 | 64.3 | 993 |
| 1 545 | 63.5 | 980 | 63.6 | 983 | 63.8 | 986 | 63.9 | 988 | 64.1 | 990 | 64.3 | 993 | 64.4 | 995 |
| 1 546 | 63.6 | 982 | 63.7 | 985 | 63.9 | 988 | 64.0 | 990 | 64.2 | 992 | 64.3 | 995 | 64.5 | 997 |
| 1 547 | 63.6 | 985 | 63.8 | 987 | 64.0 | 989 | 64.1 | 992 | 64.3 | 994 | 64.4 | 997 | 64.6 | 999 |
| 1 548 | 63.7 | 987 | 63.9 | 989 | 64.1 | 991 | 64.2 | 994 | 64.4 | 996 | 64.5 | 999 | 64.7 | 1 001 |
| 1 549 | 63.8 | 989 | 64.0 | 991 | 64.1 | 994 | 64.3 | 996 | 64.5 | 998 | 64.6 | 1 001 | 64.8 | 1 003 |
| 1 550 | 63.9 | 991 | 64.1 | 993 | 64.2 | 996 | 64.4 | 998 | 64.5 | 1 001 | 64.7 | 1 003 | 64.9 | 1 005 |
| 1 551 | 64.0 | 993 | 64.2 | 995 | 64.3 | 998 | 64.5 | 1 000 | 64.6 | 1 003 | 64.8 | 1 005 | 64.9 | 1 007 |
| 1 552 | 64.1 | 995 | 64.2 | 997 | 64.4 | 1 000 | 64.6 | 1 002 | 64.7 | 1 005 | 64.9 | 1 007 | 65.0 | 1 009 |
| 1 553 | 64.2 | 997 | 64.3 | 999 | 64.5 | 1 002 | 64.7 | 1 004 | 64.8 | 1 006 | 65.0 | 1 009 | 65.1 | 1 011 |
| 1 554 | 64.3 | 999 | 64.4 | 1 001 | 64.6 | 1 004 | 64.7 | 1 006 | 64.9 | 1 009 | 65.1 | 1 011 | 65.2 | 1 013 |
| 1 555 | 64.4 | 1 001 | 64.5 | 1 003 | 64.7 | 1 006 | 64.8 | 1 008 | 65.0 | 1 011 | 65.2 | 1 013 | 65.3 | 1 015 |
| 1 556 | 64.4 | 1 003 | 64.6 | 1 005 | 64.8 | 1 008 | 64.9 | 1 010 | 65.1 | 1 013 | 65.2 | 1 015 | 65.4 | 1 017 |
| 1 557 | 64.5 | 1 005 | 64.7 | 1 007 | 64.8 | 1 010 | 65.0 | 1 012 | 65.2 | 1 015 | 65.3 | 1 017 | 65.5 | 1 020 |
| 1 558 | 64.6 | 1 007 | 64.8 | 1 009 | 64.9 | 1 012 | 65.1 | 1 014 | 65.3 | 1 017 | 65.4 | 1 019 | 65.6 | 1 022 |
| 1 559 | 64.7 | 1 009 | 64.9 | 1 011 | 65.0 | 1 014 | 65.2 | 1 016 | 65.3 | 1 019 | 65.5 | 1 021 | 65.7 | 1 023 |
| 1 560 | 64.8 | 1 011 | 65.0 | 1 013 | 65.1 | 1 016 | 65.3 | 1 018 | 65.4 | 1 021 | 65.6 | 1 023 | 65.7 | 1 026 |
| 1 561 | 64.9 | 1 033 | 65.0 | 1 015 | 65.2 | 1 018 | 65.4 | 1 020 | 65.5 | 1 023 | 65.7 | 1 025 | 65.8 | 1 028 |
| 1 562 | 65.0 | 1 015 | 65.1 | 1 017 | 65.3 | 1 020 | 65.5 | 1 022 | 65.6 | 1 025 | 65.8 | 1 027 | 65.9 | 1 030 |
| 1 563 | 65.1 | 1 017 | 65.2 | 1 019 | 65.4 | 1 022 | 65.5 | 1 024 | 65.7 | 1 027 | 65.9 | 1 029 | 66.0 | 1 032 |
| 1 564 | 65.2 | 1 019 | 65.3 | 1 021 | 65.5 | 1 024 | 65.6 | 1 026 | 65.8 | 1 029 | 65.9 | 1 031 | 66.1 | 1 034 |
| 1 565 | 65.2 | 1 021 | 65.4 | 1 024 | 65.6 | 1 026 | 65.7 | 1 029 | 65.9 | 1 031 | 66.0 | 1 033 | 66.2 | 1 036 |
| 1 566 | 65.3 | 1 023 | 65.5 | 1 026 | 65.6 | 1 028 | 65.8 | 1 030 | 66.0 | 1 033 | 66.1 | 1 035 | 66.3 | 1 038 |
| 1 567 | 65.4 | 1 025 | 65.6 | 1 027 | 65.7 | 1 030 | 65.9 | 1 032 | 66.1 | 1 035 | 66.2 | 1 038 | 66.4 | 1 040 |
| 1 568 | 65.5 | 1 027 | 65.7 | 1 030 | 65.8 | 1 032 | 66.0 | 1 035 | 66.1 | 1 037 | 66.3 | 1 040 | 66.4 | 1 042 |
| 1 569 | 65.6 | 1 029 | 65.7 | 1 032 | 65.9 | 1 034 | 66.1 | 1 037 | 66.2 | 1 039 | 66.4 | 1 042 | 66.5 | 1 044 |
| 1 570 | 65.7 | 1 031 | 65.8 | 1 034 | 66.0 | 1 036 | 66.2 | 1 039 | 66.3 | 1 041 | 66.5 | 1 044 | 66.6 | 1 046 |
| 1 571 | 65.8 | 1 033 | 65.9 | 1 036 | 66.1 | 1 038 | 66.2 | 1 041 | 66.4 | 1 043 | 66.6 | 1 046 | 66.7 | 1 048 |
| 1 572 | 65.9 | 1 035 | 66.0 | 1 038 | 66.2 | 1 040 | 66.3 | 1 043 | 66.5 | 1 045 | 66.6 | 1 048 | 66.8 | 1 050 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 63.9 | 981 | 64.0 | 984 | 64.2 | 986 | 64.3 | 988 | 64.5 | 991 | 64.6 | 993 | 64.8 | 996 | 64.9 | 998 | 65.1 | 1 000 | **1 537** |
| 63.9 | 983 | 64.1 | 986 | 64.3 | 988 | 64.4 | 990 | 64.6 | 993 | 64.7 | 995 | 64.9 | 998 | 65.0 | 1 000 | 65.2 | 1 002 | **1 538** |
| 64.0 | 985 | 64.2 | 988 | 64.3 | 990 | 64.5 | 993 | 64.6 | 995 | 64.8 | 997 | 65.0 | 1 000 | 65.1 | 1 002 | 65.3 | 1 004 | **1 539** |
| 64.1 | 987 | 64.3 | 990 | 64.4 | 992 | 64.6 | 995 | 64.7 | 997 | 64.9 | 999 | 65.0 | 1 002 | 65.2 | 1 004 | 65.3 | 1 006 | **1 540** |
| 64.2 | 989 | 64.4 | 992 | 64.5 | 994 | 64.7 | 997 | 64.8 | 999 | 65.0 | 1 001 | 65.1 | 1 004 | 65.3 | 1 006 | 65.4 | 1 008 | **1 541** |
| 64.3 | 991 | 64.4 | 994 | 64.6 | 996 | 64.8 | 999 | 64.9 | 1 001 | 65.1 | 1 003 | 65.2 | 1 006 | 65.4 | 1 008 | 65.5 | 1 010 | **1 542** |
| 64.3 | 993 | 64.5 | 996 | 64.7 | 998 | 64.9 | 1 000 | 65.0 | 1 003 | 65.2 | 1 005 | 65.3 | 1 008 | 65.5 | 1 010 | 65.6 | 1 013 | **1 543** |
| 64.5 | 995 | 64.6 | 998 | 64.8 | 1 000 | 64.9 | 1 003 | 65.1 | 1 005 | 65.3 | 1 007 | 65.4 | 1 010 | 65.6 | 1 012 | 65.7 | 1 015 | **1 544** |
| 64.6 | 997 | 64.7 | 1 000 | 64.9 | 1 002 | 65.0 | 1 005 | 65.2 | 1 007 | 65.3 | 1 010 | 65.5 | 1 012 | 65.6 | 1 014 | 65.8 | 1 017 | **1 545** |
| 64.6 | 999 | 64.8 | 1 002 | 65.0 | 1 004 | 65.1 | 1 007 | 65.3 | 1 009 | 65.4 | 1 012 | 65.6 | 1 014 | 65.7 | 1 016 | 65.9 | 1 019 | **1 546** |
| 64.7 | 1 002 | 64.9 | 1 004 | 65.1 | 1 006 | 65.2 | 1 009 | 65.4 | 1 011 | 65.5 | 1 014 | 65.7 | 1 016 | 65.8 | 1 018 | 66.0 | 1 021 | **1 547** |
| 64.8 | 1 004 | 65.0 | 1 006 | 65.1 | 1 008 | 65.3 | 1 011 | 65.5 | 1 014 | 65.6 | 1 016 | 65.8 | 1 018 | 65.9 | 1 020 | 66.1 | 1 023 | **1 548** |
| 64.9 | 1 006 | 65.1 | 1 008 | 65.2 | 1 010 | 65.4 | 1 013 | 65.5 | 1 015 | 65.7 | 1 018 | 65.8 | 1 020 | 66.0 | 1 022 | 66.2 | 1 025 | **1 549** |
| 65.0 | 1 008 | 65.2 | 1 010 | 65.3 | 1 012 | 65.5 | 1 015 | 65.6 | 1 017 | 65.8 | 1 020 | 65.9 | 1 022 | 66.1 | 1 024 | 66.2 | 1 027 | **1 550** |
| 65.1 | 1 010 | 65.3 | 1 012 | 65.4 | 1 015 | 65.6 | 1 017 | 65.7 | 1 019 | 65.9 | 1 022 | 66.0 | 1 024 | 66.2 | 1 026 | 66.3 | 1 029 | **1 551** |
| 65.2 | 1 012 | 65.3 | 1 014 | 65.5 | 1 017 | 65.7 | 1 019 | 65.8 | 1 021 | 66.0 | 1 024 | 66.1 | 1 026 | 66.3 | 1 029 | 66.4 | 1 031 | **1 552** |
| 65.3 | 1 014 | 65.4 | 1 016 | 65.6 | 1 019 | 65.8 | 1 021 | 65.9 | 1 023 | 66.1 | 1 026 | 66.2 | 1 028 | 66.4 | 1 031 | 66.5 | 1 033 | **1 553** |
| 65.4 | 1 016 | 65.5 | 1 018 | 65.7 | 1 021 | 65.8 | 1 023 | 66.0 | 1 025 | 66.2 | 1 028 | 66.3 | 1 030 | 66.4 | 1 033 | 66.6 | 1 035 | **1 554** |
| 65.5 | 1 018 | 65.6 | 1 020 | 65.8 | 1 023 | 65.9 | 1 025 | 66.1 | 1 028 | 66.3 | 1 030 | 66.4 | 1 032 | 66.5 | 1 035 | 66.7 | 1 037 | **1 555** |
| 65.5 | 1 020 | 65.7 | 1 022 | 65.9 | 1 025 | 66.0 | 1 027 | 66.2 | 1 030 | 66.4 | 1 032 | 66.5 | 1 034 | 66.7 | 1 036 | 66.8 | 1 039 | **1 556** |
| 65.6 | 1 022 | 65.8 | 1 024 | 65.9 | 1 027 | 66.1 | 1 029 | 66.3 | 1 032 | 66.5 | 1 034 | 66.6 | 1 036 | 66.7 | 1 039 | 66.9 | 1 041 | **1 557** |
| 65.7 | 1 024 | 65.9 | 1 026 | 66.0 | 1 029 | 66.2 | 1 031 | 66.3 | 1 034 | 66.6 | 1 036 | 66.7 | 1 039 | 66.8 | 1 041 | 67.0 | 1 043 | **1 558** |
| 65.8 | 1 026 | 66.0 | 1 028 | 66.1 | 1 031 | 66.3 | 1 033 | 66.4 | 1 036 | 66.6 | 1 038 | 66.7 | 1 041 | 66.9 | 1 043 | 67.1 | 1 045 | **1 559** |
| 65.9 | 1 028 | 66.1 | 1 031 | 66.2 | 1 033 | 66.4 | 1 035 | 66.5 | 1 038 | 66.7 | 1 040 | 66.8 | 1 043 | 67.0 | 1 045 | 67.1 | 1 047 | **1 560** |
| 66.0 | 1 030 | 66.1 | 1 032 | 66.3 | 1 035 | 66.5 | 1 037 | 66.6 | 1 040 | 66.8 | 1 042 | 66.9 | 1 045 | 67.1 | 1 047 | 67.2 | 1 049 | **1 561** |
| 66.1 | 1 032 | 66.2 | 1 035 | 66.4 | 1 037 | 66.5 | 1 040 | 66.7 | 1 042 | 66.9 | 1 045 | 67.0 | 1 047 | 67.2 | 1 049 | 67.3 | 1 051 | **1 562** |
| 66.2 | 1 034 | 66.3 | 1 037 | 66.5 | 1 039 | 66.6 | 1 042 | 66.8 | 1 044 | 67.0 | 1 046 | 67.1 | 1 050 | 67.3 | 1 051 | 67.4 | 1 054 | **1 563** |
| 66.3 | 1 036 | 66.4 | 1 039 | 66.6 | 1 041 | 66.7 | 1 044 | 66.9 | 1 046 | 67.0 | 1 049 | 67.2 | 1 051 | 67.3 | 1 053 | 67.5 | 1 056 | **1 564** |
| 66.3 | 1 038 | 66.5 | 1 041 | 66.6 | 1 043 | 66.8 | 1 046 | 67.0 | 1 048 | 67.1 | 1 051 | 67.3 | 1 053 | 67.4 | 1 055 | 67.6 | 1 058 | **1 565** |
| 66.4 | 1 040 | 66.6 | 1 043 | 66.7 | 1 045 | 66.9 | 1 048 | 67.1 | 1 050 | 67.2 | 1 053 | 67.4 | 1 055 | 67.5 | 1 058 | 67.7 | 1 060 | **1 566** |
| 66.5 | 1 042 | 66.7 | 1 045 | 66.8 | 1 047 | 67.0 | 1 050 | 67.1 | 1 052 | 67.3 | 1 055 | 67.5 | 1 057 | 67.6 | 1 059 | 67.8 | 1 062 | **1 567** |
| 66.6 | 1 044 | 66.8 | 1 047 | 66.9 | 1 049 | 67.1 | 1 052 | 67.2 | 1 054 | 67.4 | 1 057 | 67.5 | 1 059 | 67.7 | 1 062 | 67.9 | 1 064 | **1 568** |
| 66.7 | 1 047 | 66.8 | 1 049 | 67.0 | 1 051 | 67.2 | 1 054 | 67.3 | 1 056 | 67.5 | 1 059 | 67.6 | 1 061 | 67.8 | 1 064 | 67.9 | 1 066 | **1 569** |
| 66.8 | 1 049 | 66.9 | 1 051 | 67.1 | 1 053 | 67.3 | 1 056 | 67.4 | 1 058 | 67.6 | 1 061 | 67.7 | 1 063 | 67.9 | 1 066 | 68.0 | 1 068 | **1 570** |
| 66.9 | 1 051 | 67.0 | 1 053 | 67.2 | 1 055 | 67.3 | 1 058 | 67.5 | 1 060 | 67.7 | 1 063 | 67.8 | 1 065 | 68.0 | 1 068 | 68.1 | 1 070 | **1 571** |
| 67.0 | 1 052 | 67.1 | 1 055 | 67.3 | 1 057 | 67.4 | 1 059 | 67.6 | 1 063 | 67.7 | 1 065 | 67.9 | 1 067 | 68.1 | 1 069 | 68.2 | 1 071 | **1 572** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 573 | 65.9 | 1 037 | 66.1 | 1 040 | 66.3 | 1 042 | 66.4 | 1 045 | 66.6 | 1 047 | 66.7 | 1 050 | 66.9 | 1 052 |
| 1 574 | 66.0 | 1 039 | 66.2 | 1 042 | 66.3 | 1 044 | 66.5 | 1 047 | 66.7 | 1 049 | 66.8 | 1 052 | 67.0 | 1 054 |
| 1 575 | 66.1 | 1 041 | 66.3 | 1 044 | 66.4 | 1 046 | 66.6 | 1 049 | 66.8 | 1 051 | 66.9 | 1 054 | 67.1 | 1 056 |
| 1 576 | 66.2 | 1 043 | 66.4 | 1 046 | 66.5 | 1 049 | 66.7 | 1 051 | 66.8 | 1 053 | 67.0 | 1 056 | 67.2 | 1 058 |
| 1 577 | 66.3 | 1 046 | 66.5 | 1 048 | 66.6 | 1 050 | 66.8 | 1 053 | 66.9 | 1 055 | 67.1 | 1 058 | 67.2 | 1 061 |
| 1 578 | 66.4 | 1 047 | 66.5 | 1 050 | 66.7 | 1 053 | 66.9 | 1 055 | 67.0 | 1 058 | 67.2 | 1 060 | 67.3 | 1 062 |
| 1 579 | 66.5 | 1 050 | 66.6 | 1 052 | 66.8 | 1 055 | 66.9 | 1 057 | 67.1 | 1 060 | 67.3 | 1 062 | 67.4 | 1 065 |
| 1 580 | 66.6 | 1 052 | 66.7 | 1 054 | 66.9 | 1 057 | 67.0 | 1 059 | 67.2 | 1 062 | 67.4 | 1 064 | 67.5 | 1 067 |
| 1 581 | 66.6 | 1 054 | 66.8 | 1 056 | 67.0 | 1 059 | 67.1 | 1 061 | 67.3 | 1 064 | 67.4 | 1 066 | 67.6 | 1 069 |
| 1 582 | 66.7 | 1 056 | 66.9 | 1 058 | 67.1 | 1 061 | 67.2 | 1 063 | 67.4 | 1 066 | 67.5 | 1 068 | 67.7 | 1 071 |
| 1 583 | 66.8 | 1 058 | 67.0 | 1 060 | 67.1 | 1 063 | 67.3 | 1 065 | 67.5 | 1 068 | 67.6 | 1 070 | 67.8 | 1 073 |
| 1 584 | 66.9 | 1 060 | 67.1 | 1 062 | 67.2 | 1 065 | 67.4 | 1 067 | 67.5 | 1 070 | 67.7 | 1 072 | 67.9 | 1 075 |
| 1 585 | 67.0 | 1 062 | 67.2 | 1 064 | 67.3 | 1 067 | 67.5 | 1 069 | 67.6 | 1 072 | 67.8 | 1 074 | 67.9 | 1 077 |
| 1 586 | 67.1 | 1 064 | 67.2 | 1 066 | 67.4 | 1 069 | 67.6 | 1 072 | 67.7 | 1 074 | 67.9 | 1 077 | 68.0 | 1 079 |
| 1 587 | 67.2 | 1 066 | 67.3 | 1 068 | 67.5 | 1 071 | 67.7 | 1 074 | 67.8 | 1 076 | 68.0 | 1 079 | 68.1 | 1 081 |
| 1 588 | 67.3 | 1 068 | 67.4 | 1 071 | 67.5 | 1 073 | 67.7 | 1 076 | 67.9 | 1 078 | 68.1 | 1 081 | 68.2 | 1 083 |
| 1 589 | 67.3 | 1 070 | 67.5 | 1 073 | 67.7 | 1 075 | 67.8 | 1 078 | 68.0 | 1 080 | 68.1 | 1 083 | 68.3 | 1 085 |
| 1 590 | 67.4 | 1 072 | 67.6 | 1 075 | 67.7 | 1 077 | 67.9 | 1 080 | 68.1 | 1 082 | 68.2 | 1 085 | 68.4 | 1 087 |
| 1 591 | 67.5 | 1 074 | 67.7 | 1 077 | 67.8 | 1 079 | 68.0 | 1 082 | 68.2 | 1 084 | 68.3 | 1 087 | 68.5 | 1 089 |
| 1 592 | 67.6 | 1 076 | 67.8 | 1 079 | 67.9 | 1 081 | 68.1 | 1 084 | 68.2 | 1 086 | 68.4 | 1 089 | 68.6 | 1 091 |
| 1 593 | 67.7 | 1 078 | 67.9 | 1 081 | 68.0 | 1 083 | 68.2 | 1 086 | 68.3 | 1 088 | 68.5 | 1 091 | 68.6 | 1 093 |
| 1 594 | 67.8 | 1 080 | 67.9 | 1 083 | 68.1 | 1 086 | 68.3 | 1 088 | 68.4 | 1 091 | 68.6 | 1 093 | 68.7 | 1 095 |
| 1 595 | 67.9 | 1 083 | 68.0 | 1 085 | 68.2 | 1 087 | 68.3 | 1 090 | 68.5 | 1 093 | 68.7 | 1 095 | 68.8 | 1 098 |
| 1 596 | 68.0 | 1 085 | 68.1 | 1 087 | 68.3 | 1 090 | 68.4 | 1 092 | 68.6 | 1 095 | 68.7 | 1 097 | 68.9 | 1 100 |
| 1 597 | 68.0 | 1 087 | 68.2 | 1 089 | 68.4 | 1 092 | 68.5 | 1 094 | 68.7 | 1 097 | 68.8 | 1 099 | 69.0 | 1 102 |
| 1 598 | 68.1 | 1 089 | 68.3 | 1 091 | 68.4 | 1 094 | 68.6 | 1 096 | 68.8 | 1 099 | 68.9 | 1 101 | 69.1 | 1 104 |
| 1 599 | 68.2 | 1 091 | 68.4 | 1 093 | 68.5 | 1 096 | 68.7 | 1 098 | 68.9 | 1 101 | 69.0 | 1 103 | 69.2 | 1 106 |
| 1 600 | 68.3 | 1 093 | 68.5 | 1 095 | 68.6 | 1 098 | 68.8 | 1 100 | 68.9 | 1 103 | 69.1 | 1 106 | 69.3 | 1 108 |
| 1 601 | 68.4 | 1 095 | 68.5 | 1 097 | 68.7 | 1 100 | 68.9 | 1 103 | 69.0 | 1 105 | 69.2 | 1 108 | 69.3 | 1 110 |
| 1 602 | 68.5 | 1 097 | 68.6 | 1 099 | 68.8 | 1 102 | 69.0 | 1 105 | 69.1 | 1 107 | 69.3 | 1 110 | 69.4 | 1 112 |
| 1 603 | 68.6 | 1 099 | 68.7 | 1 102 | 68.9 | 1 104 | 69.0 | 1 107 | 69.2 | 1 109 | 69.4 | 1 112 | 69.5 | 1 114 |
| 1 604 | 68.6 | 1 101 | 68.8 | 1 104 | 69.0 | 1 106 | 69.1 | 1 109 | 69.3 | 1 111 | 69.4 | 1 114 | 69.6 | 1 116 |
| 1 605 | 68.7 | 1 103 | 68.9 | 1 106 | 69.1 | 1 108 | 69.2 | 1 111 | 69.4 | 1 113 | 69.5 | 1 116 | 69.7 | 1 119 |
| 1 606 | 68.8 | 1 105 | 69.0 | 1 108 | 69.1 | 1 110 | 69.3 | 1 113 | 69.5 | 1 116 | 69.6 | 1 118 | 69.8 | 1 121 |
| 1 607 | 68.9 | 1 107 | 69.1 | 1 110 | 69.2 | 1 112 | 69.4 | 1 115 | 69.5 | 1 118 | 69.7 | 1 120 | 69.9 | 1 123 |
| 1 608 | 69.0 | 1 109 | 69.1 | 1 112 | 69.3 | 1 115 | 69.5 | 1 117 | 69.6 | 1 120 | 69.8 | 1 122 | 69.9 | 1 125 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in $kg/m^3$) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 67.1 | 1 055 | 67.2 | 1 057 | 67.4 | 1 060 | 67.5 | 1 062 | 67.7 | 1 065 | 67.8 | 1 067 | 68.0 | 1 069 | 68.1 | 1 072 | 68.3 | 1 074 | **1 573** |
| 67.1 | 1 057 | 67.3 | 1 059 | 67.4 | 1 062 | 67.6 | 1 064 | 67.8 | 1 067 | 67.9 | 1 069 | 68.1 | 1 072 | 68.2 | 1 074 | 68.4 | 1 076 | **1 574** |
| 67.2 | 1 059 | 67.4 | 1 061 | 67.5 | 1 064 | 67.7 | 1 066 | 67.9 | 1 069 | 68.0 | 1 071 | 68.2 | 1 074 | 68.3 | 1 076 | 68.5 | 1 078 | **1 575** |
| 67.3 | 1 061 | 67.5 | 1 063 | 67.6 | 1 066 | 67.8 | 1 068 | 67.9 | 1 071 | 68.1 | 1 073 | 68.2 | 1 076 | 68.4 | 1 078 | 68.6 | 1 080 | **1 576** |
| 67.4 | 1 063 | 67.6 | 1 065 | 67.7 | 1 068 | 67.9 | 1 070 | 68.0 | 1 073 | 68.2 | 1 075 | 68.3 | 1 078 | 68.5 | 1 080 | 68.6 | 1 082 | **1 577** |
| 67.5 | 1 065 | 67.6 | 1 067 | 67.8 | 1 070 | 68.0 | 1 072 | 68.1 | 1 075 | 68.3 | 1 077 | 68.4 | 1 080 | 68.6 | 1 082 | 68.7 | 1 085 | **1 578** |
| 67.6 | 1 067 | 67.7 | 1 069 | 67.9 | 1 072 | 68.0 | 1 074 | 68.2 | 1 077 | 68.4 | 1 079 | 68.5 | 1 082 | 68.7 | 1 084 | 68.8 | 1 087 | **1 579** |
| 67.7 | 1 069 | 67.8 | 1 072 | 68.0 | 1 074 | 68.1 | 1 076 | 68.3 | 1 079 | 68.4 | 1 081 | 68.6 | 1 084 | 68.7 | 1 086 | 68.9 | 1 089 | **1 580** |
| 67.8 | 1 071 | 67.9 | 1 074 | 68.1 | 1 076 | 68.2 | 1 079 | 68.4 | 1 081 | 68.5 | 1 083 | 68.7 | 1 085 | 68.8 | 1 088 | 69.0 | 1 091 | **1 581** |
| 67.8 | 1 073 | 68.0 | 1 076 | 68.2 | 1 078 | 68.3 | 1 081 | 68.5 | 1 083 | 68.6 | 1 086 | 68.8 | 1 088 | 68.9 | 1 090 | 69.1 | 1 093 | **1 582** |
| 67.9 | 1 075 | 68.1 | 1 078 | 68.2 | 1 080 | 68.4 | 1 083 | 68.5 | 1 085 | 68.7 | 1 088 | 68.9 | 1 090 | 69.0 | 1 093 | 69.2 | 1 095 | **1 583** |
| 68.0 | 1 077 | 68.2 | 1 080 | 68.3 | 1 082 | 68.5 | 1 085 | 68.6 | 1 087 | 68.8 | 1 090 | 68.9 | 1 092 | 69.1 | 1 095 | 69.3 | 1 097 | **1 584** |
| 68.1 | 1 079 | 68.3 | 1 082 | 68.4 | 1 084 | 68.6 | 1 087 | 68.7 | 1 089 | 68.9 | 1 092 | 69.0 | 1 094 | 69.2 | 1 097 | 69.3 | 1 099 | **1 585** |
| 68.2 | 1 081 | 68.3 | 1 084 | 68.5 | 1 086 | 68.7 | 1 089 | 68.8 | 1 091 | 69.0 | 1 094 | 69.1 | 1 096 | 69.3 | 1 099 | 69.4 | 1 101 | **1 586** |
| 68.3 | 1 084 | 68.4 | 1 086 | 68.6 | 1 089 | 68.7 | 1 090 | 68.9 | 1 093 | 69.1 | 1 096 | 69.2 | 1 098 | 69.4 | 1 101 | 69.5 | 1 103 | **1 587** |
| 68.4 | 1 086 | 68.5 | 1 088 | 68.7 | 1 091 | 68.8 | 1 093 | 69.0 | 1 096 | 69.1 | 1 098 | 69.3 | 1 100 | 69.5 | 1 103 | 69.6 | 1 105 | **1 588** |
| 68.5 | 1 088 | 68.6 | 1 090 | 68.8 | 1 093 | 68.9 | 1 095 | 69.1 | 1 098 | 69.2 | 1 100 | 69.4 | 1 103 | 69.5 | 1 105 | 69.7 | 1 107 | **1 589** |
| 68.5 | 1 090 | 68.7 | 1 092 | 68.9 | 1 095 | 69.0 | 1 097 | 69.2 | 1 099 | 69.3 | 1 102 | 69.5 | 1 105 | 69.6 | 1 107 | 69.8 | 1 110 | **1 590** |
| 68.6 | 1 092 | 68.8 | 1 094 | 68.9 | 1 097 | 69.1 | 1 099 | 69.3 | 1 102 | 69.4 | 1 104 | 69.6 | 1 107 | 69.7 | 1 109 | 69.9 | 1 112 | **1 591** |
| 68.7 | 1 094 | 68.9 | 1 096 | 69.0 | 1 099 | 69.2 | 1 101 | 69.3 | 1 104 | 69.5 | 1 106 | 69.6 | 1 109 | 69.8 | 1 111 | 70.0 | 1 114 | **1 592** |
| 68.8 | 1 096 | 69.0 | 1 099 | 69.1 | 1 101 | 69.3 | 1 103 | 69.4 | 1 106 | 69.6 | 1 108 | 69.7 | 1 110 | 69.9 | 1 113 | 70.1 | 1 116 | **1 593** |
| 68.9 | 1 098 | 69.0 | 1 100 | 69.2 | 1 103 | 69.4 | 1 106 | 69.5 | 1 108 | 69.7 | 1 111 | 69.8 | 1 113 | 70.0 | 1 115 | 70.1 | 1 118 | **1 594** |
| 69.0 | 1 100 | 69.1 | 1 103 | 69.3 | 1 105 | 69.4 | 1 108 | 69.6 | 1 110 | 69.8 | 1 113 | 69.9 | 1 115 | 70.1 | 1 117 | 70.2 | 1 120 | **1 595** |
| 69.1 | 1 102 | 69.2 | 1 105 | 69.4 | 1 107 | 69.5 | 1 110 | 69.7 | 1 112 | 69.8 | 1 115 | 70.0 | 1 117 | 70.1 | 1 120 | 70.3 | 1 122 | **1 596** |
| 69.1 | 1 104 | 69.3 | 1 107 | 69.5 | 1 109 | 69.6 | 1 112 | 69.8 | 1 114 | 69.9 | 1 117 | 70.1 | 1 119 | 70.2 | 1 122 | 70.4 | 1 124 | **1 597** |
| 69.2 | 1 106 | 69.4 | 1 109 | 69.6 | 1 111 | 69.7 | 1 114 | 69.9 | 1 116 | 70.0 | 1 119 | 70.2 | 1 121 | 70.3 | 1 124 | 70.5 | 1 126 | **1 598** |
| 69.3 | 1 108 | 69.5 | 1 111 | 69.6 | 1 113 | 69.8 | 1 116 | 69.9 | 1 119 | 70.1 | 1 121 | 70.3 | 1 123 | 70.4 | 1 126 | 70.6 | 1 128 | **1 599** |
| 69.4 | 1 111 | 69.6 | 1 113 | 69.7 | 1 116 | 69.9 | 1 118 | 70.0 | 1 120 | 70.2 | 1 123 | 70.3 | 1 126 | 70.5 | 1 128 | 70.7 | 1 130 | **1 600** |
| 69.5 | 1 113 | 69.7 | 1 115 | 69.8 | 1 118 | 70.0 | 1 120 | 70.1 | 1 123 | 70.3 | 1 125 | 70.4 | 1 128 | 70.6 | 1 130 | 70.7 | 1 133 | **1 601** |
| 69.6 | 1 115 | 69.7 | 1 117 | 69.9 | 1 120 | 70.1 | 1 122 | 70.2 | 1 125 | 70.4 | 1 127 | 70.5 | 1 130 | 70.7 | 1 132 | 70.8 | 1 135 | **1 602** |
| 69.7 | 1 117 | 69.8 | 1 119 | 70.0 | 1 122 | 70.1 | 1 124 | 70.3 | 1 127 | 70.5 | 1 129 | 70.6 | 1 132 | 70.8 | 1 134 | 70.9 | 1 137 | **1 603** |
| 69.8 | 1 119 | 69.9 | 1 121 | 70.1 | 1 124 | 70.2 | 1 126 | 70.4 | 1 129 | 70.5 | 1 131 | 70.7 | 1 134 | 70.9 | 1 136 | 71.0 | 1 139 | **1 604** |
| 69.8 | 1 121 | 70.0 | 1 124 | 70.2 | 1 126 | 70.3 | 1 128 | 70.5 | 1 131 | 70.6 | 1 134 | 70.8 | 1 136 | 70.9 | 1 139 | 71.1 | 1 141 | **1 605** |
| 69.9 | 1 123 | 70.1 | 1 126 | 70.2 | 1 128 | 70.4 | 1 131 | 70.6 | 1 133 | 70.7 | 1 136 | 70.9 | 1 138 | 71.0 | 1 141 | 71.2 | 1 143 | **1 606** |
| 70.0 | 1 125 | 70.2 | 1 128 | 70.3 | 1 130 | 70.5 | 1 133 | 70.6 | 1 135 | 70.8 | 1 138 | 71.0 | 1 140 | 71.1 | 1 143 | 71.3 | 1 145 | **1 607** |
| 70.1 | 1 127 | 70.3 | 1 130 | 70.4 | 1 132 | 70.6 | 1 135 | 70.7 | 1 137 | 70.9 | 1 140 | 71.0 | 1 142 | 71.2 | 1 145 | 71.3 | 1 147 | **1 608** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 609 | 69.1 | 1 111 | 69.2 | 1 114 | 69.4 | 1 117 | 69.6 | 1 119 | 69.7 | 1 122 | 69.9 | 1 124 | 70.0 | 1 127 |
| 1 610 | 69.2 | 1 113 | 69.3 | 1 116 | 69.5 | 1 119 | 69.6 | 1 121 | 69.8 | 1 124 | 70.0 | 1 126 | 70.1 | 1 129 |
| 1 611 | 69.2 | 1 116 | 69.4 | 1 118 | 69.6 | 1 121 | 69.7 | 1 123 | 69.9 | 1 126 | 70.0 | 1 128 | 70.2 | 1 131 |
| 1 612 | 69.3 | 1 117 | 69.5 | 1 120 | 69.7 | 1 123 | 69.8 | 1 125 | 70.0 | 1 128 | 70.1 | 1 130 | 70.3 | 1 133 |
| 1 613 | 69.4 | 1 120 | 69.6 | 1 122 | 69.7 | 1 125 | 69.9 | 1 127 | 70.1 | 1 130 | 70.2 | 1 133 | 70.4 | 1 135 |
| 1 614 | 69.5 | 1 122 | 69.7 | 1 124 | 69.8 | 1 127 | 70.0 | 1 129 | 70.1 | 1 132 | 70.3 | 1 135 | 70.5 | 1 137 |
| 1 615 | 69.6 | 1 124 | 69.7 | 1 126 | 69.9 | 1 129 | 70.1 | 1 132 | 70.2 | 1 134 | 70.4 | 1 137 | 70.6 | 1 139 |
| 1 616 | 69.7 | 1 126 | 69.8 | 1 128 | 70.0 | 1 131 | 70.2 | 1 134 | 70.3 | 1 136 | 70.5 | 1 139 | 70.6 | 1 142 |
| 1 617 | 69.8 | 1 128 | 69.9 | 1 131 | 70.1 | 1 133 | 70.2 | 1 136 | 70.4 | 1 139 | 70.6 | 1 141 | 70.7 | 1 144 |
| 1 618 | 69.8 | 1 130 | 70.0 | 1 133 | 70.2 | 1 135 | 70.3 | 1 138 | 70.5 | 1 141 | 70.6 | 1 143 | 70.8 | 1 146 |
| 1 619 | 69.9 | 1 132 | 70.1 | 1 135 | 70.2 | 1 137 | 70.4 | 1 140 | 70.6 | 1 143 | 70.7 | 1 145 | 70.9 | 1 148 |
| 1 620 | 70.0 | 1 134 | 70.2 | 1 137 | 70.3 | 1 140 | 70.5 | 1 142 | 70.7 | 1 145 | 70.8 | 1 147 | 71.0 | 1 150 |
| 1 621 | 70.1 | 1 136 | 70.3 | 1 139 | 70.4 | 1 142 | 70.6 | 1 144 | 70.8 | 1 147 | 70.9 | 1 149 | 71.1 | 1 152 |
| 1 622 | 70.2 | 1 138 | 70.3 | 1 141 | 70.5 | 1 144 | 70.7 | 1 146 | 70.8 | 1 149 | 71.0 | 1 151 | 71.2 | 1 154 |
| 1 623 | 70.3 | 1 140 | 70.4 | 1 143 | 70.6 | 1 146 | 70.8 | 1 148 | 70.9 | 1 151 | 71.1 | 1 154 | 71.2 | 1 156 |
| 1 624 | 70.4 | 1 143 | 70.5 | 1 145 | 70.7 | 1 147 | 70.8 | 1 150 | 71.0 | 1 153 | 71.2 | 1 156 | 71.3 | 1 158 |
| 1 625 | 70.4 | 1 145 | 70.6 | 1 147 | 70.8 | 1 150 | 70.9 | 1 153 | 71.1 | 1 155 | 71.2 | 1 158 | 71.4 | 1 160 |
| 1 626 | 70.5 | 1 147 | 70.7 | 1 149 | 70.9 | 1 152 | 71.0 | 1 155 | 71.2 | 1 157 | 71.3 | 1 160 | 71.5 | 1 162 |
| 1 627 | 70.6 | 1 149 | 70.8 | 1 152 | 70.9 | 1 154 | 71.1 | 1 157 | 71.3 | 1 159 | 71.4 | 1 162 | 71.6 | 1 165 |
| 1 628 | 70.7 | 1 151 | 70.9 | 1 154 | 71.0 | 1 156 | 71.2 | 1 159 | 71.5 | 1 162 | 71.5 | 1 164 | 71.7 | 1 167 |
| 1 629 | 70.8 | 1 153 | 71.0 | 1 156 | 71.1 | 1 158 | 71.3 | 1 161 | 71.4 | 1 164 | 71.6 | 1 166 | 71.8 | 1 169 |
| 1 630 | 70.9 | 1 155 | 71.0 | 1 158 | 71.2 | 1 161 | 71.4 | 1 163 | 71.5 | 1 166 | 71.7 | 1 168 | 71.8 | 1 171 |
| 1 631 | 71.0 | 1 157 | 71.1 | 1 160 | 71.3 | 1 163 | 71.4 | 1 165 | 71.6 | 1 168 | 71.8 | 1 170 | 71.9 | 1 173 |
| 1 632 | 71.0 | 1 159 | 71.2 | 1 162 | 71.4 | 1 165 | 71.5 | 1 167 | 71.7 | 1 170 | 71.8 | 1 173 | 72.0 | 1 175 |
| 1 633 | 71.1 | 1 162 | 71.3 | 1 164 | 71.5 | 1 167 | 71.6 | 1 170 | 71.8 | 1 172 | 71.9 | 1 175 | 72.1 | 1 177 |
| 1 634 | 71.2 | 1 164 | 71.4 | 1 166 | 71.5 | 1 170 | 71.7 | 1 172 | 71.9 | 1 174 | 72.0 | 1 177 | 72.2 | 1 179 |
| 1 635 | 71.3 | 1 166 | 71.5 | 1 168 | 71.6 | 1 171 | 71.8 | 1 174 | 72.0 | 1 176 | 72.1 | 1 179 | 72.3 | 1 181 |
| 1 636 | 71.4 | 1 168 | 71.5 | 1 171 | 71.7 | 1 173 | 71.9 | 1 176 | 72.0 | 1 178 | 72.2 | 1 181 | 72.3 | 1 184 |
| 1 637 | 71.5 | 1 170 | 71.6 | 1 173 | 71.8 | 1 175 | 72.0 | 1 178 | 72.1 | 1 181 | 72.3 | 1 183 | 72.4 | 1 186 |
| 1 638 | 71.6 | 1 172 | 71.7 | 1 175 | 71.9 | 1 177 | 72.0 | 1 180 | 72.2 | 1 183 | 72.4 | 1 185 | 72.5 | 1 188 |
| 1 639 | 71.6 | 1 174 | 71.8 | 1 177 | 72.0 | 1 179 | 72.1 | 1 182 | 72.3 | 1 185 | 72.4 | 1 187 | 72.6 | 1 190 |
| 1 640 | 71.7 | 1 176 | 71.9 | 1 179 | 72.0 | 1 182 | 72.2 | 1 184 | 72.4 | 1 187 | 72.5 | 1 189 | 72.7 | 1 192 |
| 1 641 | 71.8 | 1 178 | 72.0 | 1 181 | 72.1 | 1 184 | 72.3 | 1 186 | 72.4 | 1 189 | 72.6 | 1 192 | 72.8 | 1 194 |
| 1 642 | 71.9 | 1 180 | 72.1 | 1 183 | 72.2 | 1 186 | 72.4 | 1 188 | 72.5 | 1 191 | 72.7 | 1 194 | 72.9 | 1 196 |
| 1 643 | 72.0 | 1 182 | 72.1 | 1 185 | 72.3 | 1 188 | 72.5 | 1 191 | 72.6 | 1 193 | 72.8 | 1 196 | 72.9 | 1 198 |
| 1 644 | 72.1 | 1 185 | 72.2 | 1 187 | 72.4 | 1 190 | 72.6 | 1 193 | 72.7 | 1 195 | 72.9 | 1 198 | 73.0 | 1 201 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 70.2 | 1 129 | 70.3 | 1 132 | 70.5 | 1 134 | 70.7 | 1 137 | 70.8 | 1 139 | 71.0 | 1 142 | 71.1 | 1 144 | 71.3 | 1 147 | 71.4 | 1 149 | **1 609** |
| 70.3 | 1 131 | 70.4 | 1 134 | 70.6 | 1 136 | 70.7 | 1 139 | 70.9 | 1 141 | 71.1 | 1 144 | 71.2 | 1 147 | 71.4 | 1 149 | 71.5 | 1 151 | **1 610** |
| 70.4 | 1 133 | 70.5 | 1 136 | 70.7 | 1 138 | 70.8 | 1 141 | 71.0 | 1 143 | 71.1 | 1 146 | 71.3 | 1 149 | 71.5 | 1 151 | 71.6 | 1 154 | **1 611** |
| 70.4 | 1 136 | 70.6 | 1 138 | 70.8 | 1 141 | 70.9 | 1 143 | 71.1 | 1 146 | 71.2 | 1 148 | 71.4 | 1 151 | 71.6 | 1 153 | 71.7 | 1 156 | **1 612** |
| 70.5 | 1 138 | 70.7 | 1 140 | 70.8 | 1 143 | 71.0 | 1 145 | 71.2 | 1 148 | 71.3 | 1 150 | 71.5 | 1 153 | 71.6 | 1 155 | 71.8 | 1 158 | **1 613** |
| 70.6 | 1 140 | 70.8 | 1 142 | 70.9 | 1 145 | 71.1 | 1 147 | 71.2 | 1 150 | 71.4 | 1 155 | 71.6 | 1 155 | 71.7 | 1 158 | 71.9 | 1 160 | **1 614** |
| 70.7 | 1 142 | 70.9 | 1 144 | 71.0 | 1 147 | 71.2 | 1 149 | 71.3 | 1 152 | 71.5 | 1 155 | 71.6 | 1 157 | 71.8 | 1 160 | 72.0 | 1 162 | **1 615** |
| 70.8 | 1 144 | 70.9 | 1 147 | 71.1 | 1 149 | 71.3 | 1 152 | 71.4 | 1 154 | 71.6 | 1 157 | 71.7 | 1 159 | 71.9 | 1 162 | 72.0 | 1 164 | **1 616** |
| 70.9 | 1 146 | 71.0 | 1 149 | 71.2 | 1 151 | 71.3 | 1 154 | 71.5 | 1 156 | 71.7 | 1 159 | 71.8 | 1 161 | 72.0 | 1 164 | 72.1 | 1 166 | **1 617** |
| 71.0 | 1 148 | 71.1 | 1 151 | 71.3 | 1 153 | 71.4 | 1 156 | 71.6 | 1 158 | 71.8 | 1 161 | 71.9 | 1 164 | 72.1 | 1 166 | 72.2 | 1 168 | **1 618** |
| 71.1 | 1 150 | 71.2 | 1 155 | 71.4 | 1 155 | 71.5 | 1 158 | 71.7 | 1 160 | 71.8 | 1 163 | 72.0 | 1 166 | 72.2 | 1 168 | 72.3 | 1 171 | **1 619** |
| 71.1 | 1 152 | 71.3 | 1 155 | 71.4 | 1 157 | 71.6 | 1 160 | 71.8 | 1 163 | 71.9 | 1 165 | 72.1 | 1 168 | 72.2 | 1 170 | 72.4 | 1 173 | **1 620** |
| 71.2 | 1 154 | 71.4 | 1 157 | 71.5 | 1 160 | 71.7 | 1 162 | 71.9 | 1 165 | 72.0 | 1 167 | 72.2 | 1 170 | 72.3 | 1 172 | 72.5 | 1 175 | **1 621** |
| 71.3 | 1 157 | 71.5 | 1 159 | 71.6 | 1 162 | 71.8 | 1 164 | 71.9 | 1 167 | 72.1 | 1 169 | 72.3 | 1 172 | 72.4 | 1 174 | 72.6 | 1 177 | **1 622** |
| 71.4 | 1 159 | 71.5 | 1 161 | 71.7 | 1 164 | 71.9 | 1 166 | 72.0 | 1 169 | 72.2 | 1 171 | 72.3 | 1 174 | 72.5 | 1 177 | 72.6 | 1 179 | **1 623** |
| 71.5 | 1 161 | 71.6 | 1 163 | 71.8 | 1 166 | 71.9 | 1 168 | 72.1 | 1 171 | 72.3 | 1 174 | 72.4 | 1 176 | 72.6 | 1 179 | 72.7 | 1 181 | **1 624** |
| 71.6 | 1 163 | 71.7 | 1 165 | 71.9 | 1 168 | 72.0 | 1 170 | 72.2 | 1 173 | 72.4 | 1 176 | 72.5 | 1 178 | 72.7 | 1 181 | 72.8 | 1 183 | **1 625** |
| 71.7 | 1 165 | 71.8 | 1 167 | 72.0 | 1 170 | 72.1 | 1 173 | 72.3 | 1 175 | 72.4 | 1 178 | 72.6 | 1 180 | 72.8 | 1 183 | 72.9 | 1 186 | **1 626** |
| 71.7 | 1 167 | 71.9 | 1 170 | 72.1 | 1 172 | 72.2 | 1 175 | 72.4 | 1 177 | 72.5 | 1 180 | 72.7 | 1 183 | 72.8 | 1 185 | 73.0 | 1 188 | **1 627** |
| 71.8 | 1 169 | 72.0 | 1 172 | 72.1 | 1 174 | 72.3 | 1 177 | 72.4 | 1 179 | 72.6 | 1 182 | 72.8 | 1 185 | 72.9 | 1 187 | 73.1 | 1 190 | **1 628** |
| 71.9 | 1 171 | 72.1 | 1 174 | 72.2 | 1 176 | 72.4 | 1 179 | 72.5 | 1 182 | 72.7 | 1 184 | 72.9 | 1 187 | 73.0 | 1 189 | 73.2 | 1 192 | **1 629** |
| 72.0 | 1 173 | 72.1 | 1 176 | 72.3 | 1 179 | 72.5 | 1 181 | 72.6 | 1 184 | 72.8 | 1 186 | 72.9 | 1 189 | 73.1 | 1 192 | 73.3 | 1 194 | **1 630** |
| 72.1 | 1 175 | 72.2 | 1 178 | 72.4 | 1 181 | 72.5 | 1 183 | 72.7 | 1 186 | 72.9 | 1 189 | 73.0 | 1 191 | 73.2 | 1 194 | 73.3 | 1 196 | **1 631** |
| 72.2 | 1 178 | 72.3 | 1 180 | 72.5 | 1 183 | 72.6 | 1 185 | 72.8 | 1 188 | 72.9 | 1 191 | 73.1 | 1 193 | 73.3 | 1 196 | 73.4 | 1 198 | **1 632** |
| 72.2 | 1 180 | 72.4 | 1 182 | 72.6 | 1 185 | 72.7 | 1 188 | 72.9 | 1 190 | 73.0 | 1 193 | 73.2 | 1 195 | 73.4 | 1 198 | 73.5 | 1 200 | **1 633** |
| 72.3 | 1 182 | 72.5 | 1 184 | 72.6 | 1 187 | 72.8 | 1 190 | 73.0 | 1 192 | 73.1 | 1 195 | 73.3 | 1 197 | 73.4 | 1 200 | 73.6 | 1 202 | **1 634** |
| 72.4 | 1 184 | 72.6 | 1 187 | 72.7 | 1 189 | 72.9 | 1 192 | 73.1 | 1 194 | 73.2 | 1 197 | 73.4 | 1 199 | 73.5 | 1 202 | 73.7 | 1 205 | **1 635** |
| 72.5 | 1 186 | 72.7 | 1 189 | 72.8 | 1 191 | 73.0 | 1 194 | 73.1 | 1 197 | 73.3 | 1 199 | 73.4 | 1 202 | 73.6 | 1 204 | 73.8 | 1 207 | **1 636** |
| 72.6 | 1 188 | 72.7 | 1 191 | 72.9 | 1 194 | 73.1 | 1 196 | 73.2 | 1 199 | 73.4 | 1 201 | 73.5 | 1 204 | 73.7 | 1 206 | 73.9 | 1 209 | **1 637** |
| 72.7 | 1 190 | 72.8 | 1 193 | 73.0 | 1 196 | 73.1 | 1 198 | 73.3 | 1 201 | 73.5 | 1 203 | 73.6 | 1 206 | 73.8 | 1 209 | 73.9 | 1 211 | **1 638** |
| 72.8 | 1 193 | 72.9 | 1 195 | 73.1 | 1 198 | 73.2 | 1 200 | 73.4 | 1 203 | 73.5 | 1 205 | 73.7 | 1 208 | 73.9 | 1 211 | 74.0 | 1 213 | **1 639** |
| 72.8 | 1 195 | 73.0 | 1 197 | 73.2 | 1 200 | 73.3 | 1 202 | 73.5 | 1 205 | 73.6 | 1 208 | 73.8 | 1 210 | 73.9 | 1 213 | 74.1 | 1 215 | **1 640** |
| 72.9 | 1 197 | 73.1 | 1 199 | 73.2 | 1 202 | 73.4 | 1 204 | 73.6 | 1 207 | 73.7 | 1 210 | 73.9 | 1 212 | 74.0 | 1 215 | 74.2 | 1 218 | **1 641** |
| 73.0 | 1 199 | 73.2 | 1 201 | 73.3 | 1 204 | 73.5 | 1 207 | 73.6 | 1 209 | 73.8 | 1 212 | 74.0 | 1 214 | 74.1 | 1 217 | 74.3 | 1 220 | **1 642** |
| 73.1 | 1 201 | 73.3 | 1 204 | 73.4 | 1 206 | 73.6 | 1 209 | 73.7 | 1 211 | 73.9 | 1 214 | 74.0 | 1 216 | 74.2 | 1 219 | 74.4 | 1 222 | **1 643** |
| 73.2 | 1 203 | 73.3 | 1 206 | 73.5 | 1 208 | 73.7 | 1 211 | 73.8 | 1 214 | 74.0 | 1 216 | 74.1 | 1 219 | 74.3 | 1 221 | 74.5 | 1 224 | **1 644** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 645 | 72.1 | 1 187 | 72.3 | 1 189 | 72.5 | 1 192 | 72.6 | 1 195 | 72.8 | 1 197 | 72.9 | 1 200 | 73.1 | 1 203 |
| 1 646 | 72.2 | 1 189 | 72.4 | 1 192 | 72.6 | 1 194 | 72.7 | 1 197 | 72.9 | 1 200 | 73.0 | 1 202 | 73.2 | 1 205 |
| 1 647 | 72.3 | 1 191 | 72.5 | 1 194 | 72.6 | 1 196 | 72.8 | 1 199 | 73.0 | 1 202 | 73.1 | 1 204 | 73.3 | 1 207 |
| 1 648 | 72.4 | 1 193 | 72.6 | 1 196 | 72.7 | 1 199 | 72.9 | 1 201 | 73.0 | 1 204 | 73.2 | 1 206 | 73.4 | 1 209 |
| 1 649 | 72.5 | 1 195 | 72.7 | 1 198 | 72.8 | 1 201 | 73.0 | 1 203 | 73.1 | 1 206 | 73.3 | 1 209 | 73.4 | 1 211 |
| 1 650 | 72.6 | 1 197 | 72.7 | 1 200 | 72.9 | 1 203 | 73.1 | 1 205 | 73.2 | 1 208 | 73.4 | 1 211 | 73.5 | 1 213 |
| 1 651 | 72.7 | 1 199 | 72.8 | 1 202 | 73.0 | 1 205 | 73.1 | 1 208 | 73.3 | 1 210 | 73.5 | 1 213 | 73.6 | 1 215 |
| 1 652 | 72.7 | 1 202 | 72.9 | 1 204 | 73.1 | 1 207 | 73.2 | 1 210 | 73.4 | 1 212 | 73.5 | 1 215 | 73.7 | 1 218 |
| 1 653 | 72.8 | 1 204 | 73.0 | 1 207 | 73.1 | 1 209 | 73.3 | 1 212 | 73.5 | 1 214 | 73.6 | 1 217 | 73.8 | 1 220 |
| 1 654 | 72.9 | 1 206 | 73.1 | 1 209 | 73.2 | 1 211 | 73.4 | 1 214 | 73.6 | 1 217 | 73.7 | 1 219 | 73.9 | 1 222 |
| 1 655 | 73.0 | 1 208 | 73.2 | 1 211 | 73.3 | 1 213 | 73.5 | 1 216 | 73.6 | 1 219 | 73.8 | 1 221 | 74.0 | 1 224 |
| 1 656 | 73.1 | 1 210 | 73.2 | 1 213 | 73.4 | 1 216 | 73.6 | 1 218 | 73.7 | 1 221 | 73.9 | 1 223 | 74.1 | 1 226 |
| 1 657 | 73.2 | 1 212 | 73.3 | 1 215 | 73.5 | 1 218 | 73.6 | 1 220 | 73.8 | 1 223 | 74.0 | 1 226 | 74.1 | 1 228 |
| 1 658 | 73.2 | 1 214 | 73.4 | 1 217 | 73.6 | 1 220 | 73.7 | 1 222 | 73.9 | 1 225 | 74.1 | 1 228 | 74.2 | 1 231 |
| 1 659 | 73.3 | 1 217 | 73.5 | 1 219 | 73.7 | 1 222 | 73.8 | 1 225 | 74.0 | 1 227 | 74.1 | 1 230 | 74.3 | 1 233 |
| 1 660 | 73.4 | 1 219 | 73.6 | 1 221 | 73.7 | 1 224 | 73.9 | 1 227 | 74.1 | 1 229 | 74.2 | 1 232 | 74.4 | 1 235 |
| 1 661 | 73.5 | 1 221 | 73.7 | 1 223 | 73.8 | 1 226 | 74.0 | 1 229 | 74.1 | 1 231 | 74.3 | 1 234 | 74.5 | 1 237 |
| 1 662 | 73.6 | 1 223 | 73.7 | 1 226 | 73.9 | 1 228 | 74.1 | 1 231 | 74.2 | 1 234 | 74.4 | 1 236 | 74.6 | 1 239 |
| 1 683 | 73.7 | 1 225 | 73.8 | 1 228 | 74.0 | 1 230 | 74.2 | 1 233 | 74.3 | 1 236 | 74.5 | 1 238 | 74.6 | 1 241 |
| 1 664 | 73.7 | 1 227 | 73.9 | 1 230 | 74.1 | 1 233 | 74.2 | 1 235 | 74.4 | 1 238 | 74.6 | 1 241 | 74.7 | 1 244 |
| 1 665 | 73.8 | 1 229 | 74.0 | 1 232 | 74.2 | 1 235 | 74.3 | 1 237 | 74.5 | 1 240 | 74.6 | 1 243 | 74.8 | 1 246 |
| 1 666 | 73.9 | 1 232 | 74.1 | 1 234 | 74.2 | 1 237 | 74.4 | 1 240 | 74.6 | 1 242 | 74.7 | 1 245 | 74.9 | 1 248 |
| 1 667 | 74.0 | 1 234 | 74.2 | 1 236 | 74.3 | 1 239 | 74.5 | 1 242 | 74.7 | 1 244 | 74.8 | 1 247 | 75.0 | 1 250 |
| 1 668 | 74.1 | 1 236 | 74.2 | 1 238 | 74.4 | 1 241 | 74.6 | 1 244 | 74.7 | 1 247 | 74.9 | 1 249 | 75.1 | 1 252 |
| 1 669 | 74.2 | 1 238 | 74.3 | 1 241 | 74.5 | 1 243 | 74.7 | 1 246 | 74.8 | 1 249 | 75.0 | 1 251 | 75.2 | 1 254 |
| 1 670 | 74.2 | 1 240 | 74.4 | 1 243 | 74.6 | 1 245 | 74.7 | 1 248 | 74.9 | 1 251 | 75.1 | 1 254 | 75.2 | 1 257 |
| 1 671 | 74.3 | 1 242 | 74.5 | 1 245 | 74.7 | 1 248 | 74.8 | 1 250 | 75.0 | 1 253 | 75.2 | 1 256 | 75.3 | 1 259 |
| 1 672 | 74.4 | 1 244 | 74.6 | 1 247 | 74.7 | 1 250 | 74.9 | 1 253 | 75.1 | 1 255 | 75.2 | 1 258 | 75.4 | 1 261 |
| 1 673 | 74.5 | 1 246 | 74.7 | 1 249 | 74.8 | 1 252 | 75.0 | 1 255 | 75.2 | 1 257 | 75.3 | 1 260 | 75.5 | 1 263 |
| 1 674 | 74.6 | 1 249 | 74.8 | 1 251 | 74.9 | 1 254 | 75.1 | 1 257 | 75.2 | 1 260 | 75.4 | 1 262 | 75.6 | 1 265 |
| 1 675 | 74.7 | 1 251 | 74.8 | 1 254 | 75.0 | 1 256 | 75.2 | 1 259 | 75.3 | 1 262 | 75.5 | 1 264 | 75.7 | 1 267 |
| 1 676 | 14.8 | 1 253 | 74.9 | 1 256 | 75.1 | 1 259 | 75.2 | 1 261 | 75.4 | 1 264 | 75.6 | 1 267 | 73.7 | 1 270 |
| 1 677 | 74.8 | 1 255 | 75.0 | 1 258 | 75.2 | 1 261 | 75.3 | 1 263 | 75.5 | 1 266 | 75.7 | 1 269 | 75.8 | 1 272 |
| 1 678 | 74.9 | 1 257 | 75.1 | 1 260 | 75.3 | 1 263 | 75.4 | 1 266 | 75.6 | 1 268 | 75.7 | 1 271 | 75.9 | 1 274 |
| 1 679 | 75.0 | 1 259 | 75.2 | 1 262 | 75.3 | 1 265 | 75.5 | 1 268 | 75.7 | 1 270 | 75.8 | 1 273 | 76.0 | 1 276 |
| 1 680 | 75.1 | 1 262 | 75.3 | 1 264 | 75.4 | 1 267 | 75.6 | 1 270 | 75.8 | 1 273 | 75.9 | 1 275 | 76.1 | 1 278 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 73.3 | 1 205 | 73.4 | 1 208 | 73.6 | 1 211 | 73.7 | 1 213 | 73.9 | 1 216 | 74.1 | 1 218 | 74.2 | 1 221 | 74.4 | 1 224 | 74.5 | 1 226 | **1 645** |
| 73.4 | 1 208 | 73.5 | 1 210 | 73.7 | 1 213 | 73.8 | 1 215 | 74.0 | 1 218 | 74.1 | 1 221 | 74.3 | 1 223 | 74.5 | 1 226 | 74.6 | 1 228 | **1 646** |
| 73.4 | 1 210 | 73.6 | 1 212 | 73.8 | 1 215 | 73.9 | 1 217 | 74.1 | 1 220 | 74.2 | 1 223 | 74.4 | 1 225 | 74.6 | 1 228 | 74.7 | 1 230 | **1 647** |
| 73.5 | 1 212 | 73.7 | 1 214 | 73.8 | 1 217 | 74.0 | 1 220 | 74.2 | 1 222 | 74.3 | 1 225 | 74.5 | 1 227 | 74.6 | 1 230 | 74.8 | 1 233 | **1 648** |
| 73.6 | 1 214 | 73.8 | 1 216 | 73.9 | 1 219 | 74.1 | 1 222 | 74.2 | 1 224 | 74.4 | 1 227 | 74.6 | 1 229 | 74.7 | 1 232 | 74.9 | 1 235 | **1 649** |
| 73.7 | 1 216 | 73.9 | 1 219 | 74.0 | 1 221 | 74.2 | 1 224 | 74.3 | 1 226 | 74.5 | 1 229 | 74.7 | 1 232 | 74.8 | 1 234 | 75.0 | 1 237 | **1 650** |
| 73.8 | 1 218 | 73.9 | 1 221 | 74.1 | 1 223 | 74.3 | 1 226 | 74.4 | 1 229 | 74.6 | 1 231 | 74.7 | 1 234 | 74.9 | 1 237 | 75.1 | 1 239 | **1 651** |
| 73.9 | 1 220 | 74.0 | 1 223 | 74.2 | 1 226 | 74.3 | 1 228 | 74.5 | 1 231 | 74.7 | 1 233 | 74.8 | 1 236 | 75.0 | 1 239 | 75.1 | 1 241 | **1 652** |
| 74.0 | 1 223 | 74.1 | 1 225 | 74.3 | 1 228 | 74.4 | 1 230 | 74.6 | 1 233 | 74.7 | 1 236 | 74.9 | 1 238 | 75.1 | 1 241 | 75.2 | 1 244 | **1 653** |
| 74.0 | 1 225 | 74.2 | 1 227 | 74.4 | 1 230 | 74.5 | 1 232 | 74.7 | 1 235 | 74.8 | 1 238 | 75.0 | 1 241 | 75.2 | 1 243 | 75.3 | 1 246 | **1 654** |
| 74.1 | 1 227 | 74.3 | 1 229 | 74.4 | 1 232 | 74.6 | 1 235 | 74.8 | 1 237 | 74.9 | 1 240 | 75.1 | 1 243 | 75.2 | 1 245 | 75.4 | 1 248 | **1 655** |
| 74.2 | 1 229 | 74.4 | 1 232 | 74.5 | 1 234 | 74.7 | 1 237 | 74.8 | 1 239 | 75.0 | 1 242 | 75.2 | 1 245 | 75.3 | 1 247 | 75.5 | 1 250 | **1 656** |
| 74.3 | 1 231 | 74.5 | 1 234 | 74.6 | 1 236 | 74.8 | 1 239 | 74.9 | 1 242 | 75.1 | 1 244 | 75.3 | 1 247 | 75.4 | 1 250 | 75.6 | 1 252 | **1 657** |
| 74.4 | 1 233 | 74.5 | 1 236 | 74.7 | 1 239 | 74.9 | 1 241 | 75.0 | 1 244 | 75.2 | 1 246 | 75.3 | 1 249 | 75.5 | 1 252 | 75.7 | 1 255 | **1 658** |
| 74.5 | 1 235 | 74.6 | 1 238 | 74.8 | 1 241 | 74.9 | 1 243 | 75.1 | 1 246 | 75.3 | 1 249 | 75.4 | 1 252 | 75.6 | 1 254 | 75.8 | 1 257 | **1 659** |
| 74.6 | 1 238 | 74.7 | 1 240 | 74.9 | 1 243 | 75.0 | 1 245 | 75.2 | 1 248 | 75.4 | 1 251 | 75.5 | 1 254 | 75.7 | 1 256 | 75.8 | 1 259 | **1 660** |
| 74.6 | 1 240 | 74.8 | 1 242 | 75.0 | 1 245 | 75.1 | 1 248 | 75.3 | 1 250 | 75.4 | 1 253 | 75.6 | 1 256 | 75.8 | 1 259 | 75.9 | 1 261 | **1 661** |
| 74.7 | 1 242 | 74.9 | 1 245 | 75.0 | 1 247 | 75.2 | 1 250 | 75.4 | 1 252 | 75.5 | 1 255 | 75.7 | 1 258 | 75.9 | 1 261 | 76.0 | 1 263 | **1 662** |
| 74.8 | 1 244 | 75.0 | 1 247 | 75.1 | 1 249 | 75.3 | 1 252 | 75.5 | 1 255 | 75.6 | 1 258 | 75.8 | 1 260 | 76.0 | 1 263 | 76.1 | 1 265 | **1 663** |
| 74.9 | 1 246 | 75.1 | 1 249 | 75.2 | 1 251 | 75.4 | 1 254 | 75.5 | 1 257 | 75.7 | 1 260 | 75.9 | 1 262 | 76.0 | 1 265 | 76.2 | 1 268 | **1 664** |
| 75.0 | 1 248 | 75.1 | 1 251 | 75.3 | 1 254 | 75.5 | 1 256 | 75.6 | 1 259 | 75.8 | 1 262 | 76.0 | 1 265 | 76.1 | 1 267 | 76.3 | 1 270 | **1 665** |
| 75.1 | 1 250 | 75.2 | 1 253 | 75.4 | 1 256 | 75.5 | 1 258 | 75.7 | 1 261 | 75.9 | 1 264 | 76.0 | 1 267 | 76.2 | 1 269 | 76.4 | 1 272 | **1 666** |
| 75.1 | 1 253 | 75.3 | 1 255 | 75.5 | 1 258 | 75.6 | 1 261 | 75.8 | 1 264 | 76.0 | 1 266 | 76.1 | 1 269 | 76.3 | 1 272 | 76.4 | 1 274 | **1 667** |
| 75.2 | 1 255 | 75.4 | 1 258 | 75.6 | 1 260 | 75.7 | 1 263 | 75.9 | 1 266 | 76.1 | 1 268 | 76.2 | 1 271 | 76.4 | 1 274 | 76.5 | 1 276 | **1 668** |
| 75.3 | 1 257 | 75.5 | 1 260 | 75.6 | 1 262 | 75.8 | 1 265 | 76.0 | 1 268 | 76.1 | 1 270 | 76.3 | 1 273 | 76.5 | 1 276 | 76.6 | 1 279 | **1 669** |
| 75.4 | 1 259 | 75.6 | 1 262 | 75.7 | 1 265 | 75.9 | 1 267 | 76.1 | 1 270 | 76.2 | 1 273 | 76.4 | 1 276 | 76.5 | 1 278 | 76.7 | 1 281 | **1 670** |
| 75.5 | 1 261 | 75.7 | 1 264 | 75.8 | 1 267 | 76.0 | 1 269 | 76.1 | 1 272 | 76.3 | 1 275 | 76.5 | 1 278 | 76.6 | 1 280 | 76.8 | 1 283 | **1 671** |
| 75.6 | 1 264 | 75.7 | 1 266 | 75.9 | 1 269 | 76.1 | 1 272 | 76.2 | 1 275 | 76.4 | 1 277 | 76.6 | 1 280 | 76.7 | 1 283 | 76.9 | 1 285 | **1 672** |
| 75.7 | 1 266 | 75.8 | 1 268 | 76.0 | 1 271 | 76.1 | 1 274 | 76.3 | 1 277 | 76.5 | 1 280 | 76.6 | 1 282 | 76.8 | 1 285 | 77.0 | 1 288 | **1 673** |
| 75.7 | 1 268 | 75.9 | 1 271 | 76.1 | 1 273 | 76.2 | 1 276 | 76.4 | 1 279 | 76.6 | 1 282 | 76.7 | 1 284 | 76.9 | 1 287 | 77.1 | 1 290 | **1 674** |
| 75.8 | 1 270 | 76.0 | 1 273 | 76.2 | 1 276 | 76.3 | 1 278 | 76.5 | 1 281 | 76.7 | 1 284 | 76.8 | 1 287 | 77.0 | 1 289 | 77.1 | 1 292 | **1 675** |
| 75.9 | 1 272 | 76.1 | 1 275 | 76.2 | 1 278 | 76.4 | 1 280 | 76.6 | 1 283 | 76.7 | 1 286 | 76.9 | 1 289 | 77.1 | 1 292 | 77.2 | 1 294 | **1 676** |
| 76.0 | 1 275 | 76.2 | 1 277 | 76.3 | 1 280 | 76.5 | 1 283 | 76.7 | 1 286 | 76.8 | 1 288 | 77.0 | 1 291 | 77.1 | 1 294 | 77.3 | 1 297 | **1 677** |
| 76.1 | 1 277 | 76.2 | 1 279 | 76.4 | 1 282 | 76.6 | 1 285 | 76.7 | 1 288 | 76.9 | 1 291 | 77.1 | 1 293 | 77.2 | 1 296 | 77.4 | 1 299 | **1 678** |
| 76.2 | 1 279 | 76.3 | 1 282 | 76.5 | 1 284 | 76.7 | 1 287 | 76.8 | 1 290 | 77.0 | 1 293 | 77.2 | 1 296 | 77.3 | 1 298 | 77.5 | 1 301 | **1 679** |
| 76.3 | 1 281 | 76.4 | 1 284 | 76.6 | 1 287 | 76.7 | 1 289 | 76.9 | 1 292 | 77.1 | 1 295 | 77.3 | 1 298 | 77.4 | 1 300 | 77.6 | 1 303 | **1 680** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 681 | 75.2 | 1 264 | 75.3 | 1 267 | 75.5 | 1 269 | 75.7 | 1 272 | 75.8 | 1 275 | 76.0 | 1 278 | 76.2 | 1 280 |
| 1 682 | 75.3 | 1 266 | 75.4 | 1 269 | 75.6 | 1 271 | 75.8 | 1 274 | 75.9 | 1 277 | 76.1 | 1 280 | 76.3 | 1 283 |
| 1 683 | 75.3 | 1 268 | 75.5 | 1 271 | 75.7 | 1 274 | 75.8 | 1 277 | 76.0 | 1 279 | 76.2 | 1 282 | 76.3 | 1 285 |
| 1 684 | 75.4 | 1 270 | 75.6 | 1 273 | 75.8 | 1 276 | 75.9 | 1 279 | 76.1 | 1 281 | 76.3 | 1 284 | 76.4 | 1 287 |
| 1 685 | 75.5 | 1 272 | 75.7 | 1 275 | 75.8 | 1 278 | 76.0 | 1 281 | 76.2 | 1 284 | 76.3 | 1 286 | 76.5 | 1 289 |
| 1 686 | 75.6 | 1 275 | 75.8 | 1 277 | 75.9 | 1 280 | 76.1 | 1 283 | 76.3 | 1 286 | 76.4 | 1 289 | 76.6 | 1 291 |
| 1 687 | 75.7 | 1 277 | 75.9 | 1 280 | 76.0 | 1 282 | 76.2 | 1 285 | 76.4 | 1 288 | 76.5 | 1 291 | 76.7 | 1 294 |
| 1 688 | 75.8 | 1 279 | 75.9 | 1 282 | 76.1 | 1 285 | 76.3 | 1 287 | 76.4 | 1 290 | 76.6 | 1 293 | 76.8 | 1 296 |
| 1 689 | 75.8 | 1 282 | 76.0 | 1 284 | 76.2 | 1 287 | 76.4 | 1 290 | 76.5 | 1 292 | 76.7 | 1 295 | 76.9 | 1 298 |
| 1 690 | 75.9 | 1 283 | 76.1 | 1 286 | 76.3 | 1 289 | 76.4 | 1 292 | 76.6 | 1 295 | 76.8 | 1 297 | 76.9 | 1 300 |
| 1 691 | 76.0 | 1 285 | 76.2 | 1 288 | 76.4 | 1 291 | 76.5 | 1 294 | 76.7 | 1 297 | 76.9 | 1 300 | 77.0 | 1 303 |
| 1 692 | 76.1 | 1 288 | 76.3 | 1 290 | 76.4 | 1 293 | 76.6 | 1 296 | 76.8 | 1 299 | 76.9 | 1 302 | 77.1 | 1 305 |
| 1 693 | 76.2 | 1 290 | 76.4 | 1 293 | 76.5 | 1 295 | 76.7 | 1 298 | 76.9 | 1 301 | 77.0 | 1 304 | 77.2 | 1 307 |
| 1 694 | 76.3 | 1 292 | 76.4 | 1 295 | 76.6 | 1 298 | 76.8 | 1 301 | 76.9 | 1 304 | 77.1 | 1 306 | 77.3 | 1 309 |
| 1 695 | 76.4 | 1 294 | 76.5 | 1 297 | 76.7 | 1 300 | 76.9 | 1 303 | 77.0 | 1 306 | 77.2 | 1 309 | 77.4 | 1 311 |
| 1 696 | 76.4 | 1 296 | 76.6 | 1 299 | 76.8 | 1 302 | 76.9 | 1 305 | 77.1 | 1 308 | 77.3 | 1 311 | 77.5 | 1 314 |
| 1 697 | 76.5 | 1 299 | 76.7 | 1 302 | 76.9 | 1 304 | 77.0 | 1 307 | 77.2 | 1 310 | 77.4 | 1 313 | 77.5 | 1 316 |
| 1 698 | 76.6 | 1 301 | 76.8 | 1 304 | 77.0 | 1 307 | 77.1 | 1 309 | 77.3 | 1 312 | 77.5 | 1 315 | 77.6 | 1 318 |
| 1 699 | 76.7 | 1 303 | 76.9 | 1 306 | 77.0 | 1 309 | 77.2 | 1 312 | 77.4 | 1 315 | 77.5 | 1 317 | 77.7 | 1 320 |
| 1 700 | 76.8 | 1 305 | 77.0 | 1 308 | 77.1 | 1 311 | 77.3 | 1 314 | 77.5 | 1 317 | 77.6 | 1 320 | 77.8 | 1 322 |
| 1 701 | 76.9 | 1 307 | 77.0 | 1 310 | 77.2 | 1 313 | 77.4 | 1 316 | 77.5 | 1 319 | 77.7 | 1 322 | 77.9 | 1 325 |
| 1 702 | 76.9 | 1 310 | 77.1 | 1 313 | 77.3 | 1 315 | 77.5 | 1 318 | 77.6 | 1 321 | 77.8 | 1 324 | 78.0 | 1 327 |
| 1 703 | 77.0 | 1 312 | 77.2 | 1 315 | 77.4 | 1 318 | 77.5 | 1 321 | 77.7 | 1 323 | 77.9 | 1 326 | 78.0 | 1 329 |
| 1 704 | 77.1 | 1 314 | 77.3 | 1 317 | 77.5 | 1 320 | 77.6 | 1 323 | 77.8 | 1 326 | 78.0 | 1 329 | 78.1 | 1 332 |
| 1 705 | 77.2 | 1 316 | 77.4 | 1 319 | 77.5 | 1 322 | 77.7 | 1 325 | 77.9 | 1 328 | 78.1 | 1 331 | 78.2 | 1 334 |
| 1 706 | 77.3 | 1 319 | 77.5 | 1 321 | 77.6 | 1 324 | 77.8 | 1 327 | 78.0 | 1 330 | 78.1 | 1 333 | 78.3 | 1 336 |
| 1 707 | 77.4 | 1 321 | 77.5 | 1 324 | 77.7 | 1 327 | 77.9 | 1 330 | 78.1 | 1 332 | 78.2 | 1 335 | 78.4 | 1 338 |
| 1 708 | 77.5 | 1 323 | 77.6 | 1 326 | 77.8 | 1 329 | 78.0 | 1 332 | 78.1 | 1 335 | 78.3 | 1 338 | 78.5 | 1 341 |
| 1 709 | 77.5 | 1 325 | 77.7 | 1 328 | 77.9 | 1 331 | 78.1 | 1 334 | 78.2 | 1 337 | 78.4 | 1 340 | 78.6 | 1 343 |
| 1 710 | 77.6 | 1 327 | 77.8 | 1 330 | 78.0 | 1 333 | 78.1 | 1 336 | 78.3 | 1 339 | 78.5 | 1 342 | 78.7 | 1 345 |
| 1 711 | 77.7 | 1 330 | 77.9 | 1 333 | 78.1 | 1 336 | 78.2 | 1 339 | 78.4 | 1 341 | 78.6 | 1 345 | 78.8 | 1 347 |
| 1 712 | 77.8 | 1 332 | 78.0 | 1 335 | 78.1 | 1 338 | 78.3 | 1 341 | 78.5 | 1 344 | 78.7 | 1 347 | 78.8 | 1 350 |
| 1 713 | 77.9 | 1 334 | 78.1 | 1 337 | 78.2 | 1 340 | 78.4 | 1 343 | 78.6 | 1 346 | 78.8 | 1 349 | 78.9 | 1 352 |
| 1 714 | 78.0 | 1 336 | 78.1 | 1 339 | 78.3 | 1 342 | 78.5 | 1 346 | 78.7 | 1 348 | 78.8 | 1 351 | 79.0 | 1 354 |
| 1 715 | 78.1 | 1 339 | 78.2 | 1 341 | 78.4 | 1 345 | 78.6 | 1 348 | 78.8 | 1 351 | 78.9 | 1 354 | 79.1 | 1 357 |
| 1 716 | 78.1 | 1 341 | 78.3 | 1 344 | 78.5 | 1 347 | 78.7 | 1 350 | 78.8 | 1 353 | 79.0 | 1 356 | 79.2 | 1 359 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 76.3 | 1 283 | 76.5 | 1 286 | 76.7 | 1 289 | 76.8 | 1 292 | 77.0 | 1 294 | 77.2 | 1 297 | 77.3 | 1 300 | 77.5 | 1 303 | 77.7 | 1 306 | **1 681** |
| 76.4 | 1 285 | 76.6 | 1 288 | 76.8 | 1 291 | 76.9 | 1 294 | 77.1 | 1 297 | 77.3 | 1 300 | 77.4 | 1 302 | 77.6 | 1 305 | 77.8 | 1 308 | **1 682** |
| 76.5 | 1 288 | 76.7 | 1 291 | 76.8 | 1 293 | 77.0 | 1 296 | 77.2 | 1 299 | 77.3 | 1 302 | 77.5 | 1 303 | 77.7 | 1 307 | 77.8 | 1 310 | **1 683** |
| 76.6 | 1 290 | 76.8 | 1 293 | 76.9 | 1 296 | 77.1 | 1 298 | 77.3 | 1 301 | 77.4 | 1 304 | 77.6 | 1 307 | 77.8 | 1 310 | 77.9 | 1 313 | **1 684** |
| 76.7 | 1 292 | 76.8 | 1 295 | 77.0 | 1 298 | 77.2 | 1 300 | 77.4 | 1 303 | 77.5 | 1 306 | 77.7 | 1 309 | 77.9 | 1 312 | 78.0 | 1 315 | **1 685** |
| 76.8 | 1 294 | 76.9 | 1 297 | 77.1 | 1 300 | 77.3 | 1 303 | 77.4 | 1 306 | 77.6 | 1 309 | 77.8 | 1 311 | 78.0 | 1 314 | 78.1 | 1 317 | **1 686** |
| 76.8 | 1 296 | 77.0 | 1 299 | 77.2 | 1 302 | 77.4 | 1 305 | 77.5 | 1 308 | 77.7 | 1 311 | 77.9 | 1 314 | 78.0 | 1 316 | 78.2 | 1 319 | **1 687** |
| 76.9 | 1 299 | 77.1 | 1 301 | 77.3 | 1 304 | 77.4 | 1 307 | 77.6 | 1 310 | 77.8 | 1 313 | 78.0 | 1 316 | 78.1 | 1 319 | 78.3 | 1 322 | **1 688** |
| 77.0 | 1 301 | 77.2 | 1 304 | 77.4 | 1 307 | 77.5 | 1 309 | 77.7 | 1 312 | 77.9 | 1 315 | 78.0 | 1 318 | 78.2 | 1 321 | 78.4 | 1 324 | **1 689** |
| 77.1 | 1 303 | 77.1 | 1 306 | 77.4 | 1 309 | 77.6 | 1 312 | 77.8 | 1 315 | 78.0 | 1 318 | 78.1 | 1 320 | 78.3 | 1 323 | 78.5 | 1 326 | **1 690** |
| 77.2 | 1 305 | 77.4 | 1 308 | 77.5 | 1 311 | 77.7 | 1 314 | 77.9 | 1 317 | 78.0 | 1 320 | 78.2 | 1 323 | 78.4 | 1 326 | 78.6 | 1 328 | **1 691** |
| 77.3 | 1 308 | 77.4 | 1 310 | 77.6 | 1 313 | 77.8 | 1 316 | 78.0 | 1 319 | 78.1 | 1 322 | 78.3 | 1 325 | 78.5 | 1 328 | 78.7 | 1 331 | **1 692** |
| 77.4 | 1 310 | 77.5 | 1 313 | 77.7 | 1 315 | 77.9 | 1 319 | 78.1 | 1 321 | 78.2 | 1 324 | 78.4 | 1 327 | 78.6 | 1 330 | 78.7 | 1 333 | **1 693** |
| 77.4 | 1 312 | 77.6 | 1 315 | 77.8 | 1 318 | 78.0 | 1 321 | 78.1 | 1 324 | 78.3 | 1 327 | 78.5 | 1 330 | 78.7 | 1 333 | 78.8 | 1 335 | **1 694** |
| 77.5 | 1 314 | 77.7 | 1 317 | 77.9 | 1 320 | 78.1 | 1 323 | 78.2 | 1 326 | 78.4 | 1 329 | 78.6 | 1 332 | 78.7 | 1 335 | 78.9 | 1 338 | **1 695** |
| 77.6 | 1 316 | 77.8 | 1 319 | 78.0 | 1 322 | 78.1 | 1 325 | 78.3 | 1 328 | 78.5 | 1 331 | 78.7 | 1 334 | 78.8 | 1 337 | 79.0 | 1 340 | **1 696** |
| 77.7 | 1 319 | 77.9 | 1 322 | 78.1 | 1 325 | 78.2 | 1 328 | 78.4 | 1 330 | 78.6 | 1 334 | 78.8 | 1 337 | 78.9 | 1 339 | 79.1 | 1 342 | **1 697** |
| 77.8 | 1 321 | 78.0 | 1 324 | 78.1 | 1 327 | 78.3 | 1 330 | 78.5 | 1 333 | 78.7 | 1 336 | 78.8 | 1 339 | 79.0 | 1 342 | 79.2 | 1 345 | **1 698** |
| 77.9 | 1 323 | 78.1 | 1 326 | 78.2 | 1 329 | 78.4 | 1 332 | 78.6 | 1 335 | 78.8 | 1 338 | 78.9 | 1 341 | 79.1 | 1 344 | 79.3 | 1 347 | **1 699** |
| 78.0 | 1 325 | 78.1 | 1 328 | 78.3 | 1 331 | 78.5 | 1 334 | 78.7 | 1 337 | 78.8 | 1 340 | 79.0 | 1 343 | 79.2 | 1 346 | 79.4 | 1 349 | **1 700** |
| 78.1 | 1 328 | 78.2 | 1 331 | 78.4 | 1 334 | 78.6 | 1 337 | 78.8 | 1 340 | 78.9 | 1 343 | 79.1 | 1 346 | 79.3 | 1 349 | 79.5 | 1 352 | **1 701** |
| 78.1 | 1 330 | 78.3 | 1 333 | 78.5 | 1 336 | 78.7 | 1 339 | 78.8 | 1 342 | 79.0 | 1 345 | 79.2 | 1 348 | 79.4 | 1 351 | 79.6 | 1 354 | **1 702** |
| 78.2 | 1 332 | 78.4 | 1 335 | 78.6 | 1 338 | 78.8 | 1 341 | 78.9 | 1 344 | 79.1 | 1 347 | 79.3 | 1 350 | 79.5 | 1 353 | 79.6 | 1 356 | **1 703** |
| 78.3 | 1 334 | 78.5 | 1 337 | 78.7 | 1 341 | 78.8 | 1 343 | 79.0 | 1 347 | 79.2 | 1 349 | 79.4 | 1 352 | 79.6 | 1 356 | 79.7 | 1 359 | **1 704** |
| 78.4 | 1 337 | 78.6 | 1 340 | 78.8 | 1 343 | 78.9 | 1 346 | 79.1 | 1 349 | 79.3 | 1 352 | 79.5 | 1 355 | 79.6 | 1 358 | 79.8 | 1 361 | **1 705** |
| 78.5 | 1 339 | 78.7 | 1 342 | 78.8 | 1 345 | 79.0 | 1 348 | 79.2 | 1 351 | 79.4 | 1 354 | 79.6 | 1 357 | 79.7 | 1 360 | 79.9 | 1 363 | **1 706** |
| 78.6 | 1 341 | 78.8 | 1 344 | 78.9 | 1 347 | 79.1 | 1 350 | 79.3 | 1 353 | 79.5 | 1 356 | 79.6 | 1 359 | 79.8 | 1 363 | 80.0 | 1 366 | **1 707** |
| 78.7 | 1 344 | 78.8 | 1 347 | 79.0 | 1 350 | 79.2 | 1 353 | 79.4 | 1 356 | 79.6 | 1 359 | 79.7 | 1 362 | 79.9 | 1 365 | 80.1 | 1 368 | **1 708** |
| 78.8 | 1 346 | 78.9 | 1 349 | 79.1 | 1 352 | 79.3 | 1 355 | 79.5 | 1 358 | 79.6 | 1 361 | 79.8 | 1 364 | 80.0 | 1 367 | 80.2 | 1 371 | **1 709** |
| 78.8 | 1 348 | 79.0 | 1 351 | 79.2 | 1 354 | 79.4 | 1 357 | 79.6 | 1 360 | 79.7 | 1 363 | 79.9 | 1 366 | 80.1 | 1 370 | 80.3 | 1 373 | **1 710** |
| 78.9 | 1 350 | 79.1 | 1 353 | 79.3 | 1 356 | 79.5 | 1 360 | 79.6 | 1 363 | 79.8 | 1 366 | 80.0 | 1 369 | 80.2 | 1 372 | 80.4 | 1 375 | **1 711** |
| 79.0 | 1 353 | 79.2 | 1 356 | 79.4 | 1 359 | 79.6 | 1 362 | 79.7 | 1 365 | 79.9 | 1 368 | 80.1 | 1 371 | 80.3 | 1 375 | 80.5 | 1 378 | **1 712** |
| 79.1 | 1 355 | 79.3 | 1 358 | 79.5 | 1 361 | 79.6 | 1 364 | 79.8 | 1 367 | 80.0 | 1 370 | 80.2 | 1 373 | 80.4 | 1 377 | 80.6 | 1 380 | **1 713** |
| 79.2 | 1 357 | 79.4 | 1 360 | 79.6 | 1 363 | 79.7 | 1 367 | 79.9 | 1 370 | 80.1 | 1 373 | 80.3 | 1 376 | 80.5 | 1 379 | 80.7 | 1 383 | **1 714** |
| 79.3 | 1 360 | 79.5 | 1 363 | 79.6 | 1 366 | 79.8 | 1 369 | 80.0 | 1 372 | 80.2 | 1 375 | 80.4 | 1 378 | 80.6 | 1 382 | 80.8 | 1 385 | **1 715** |
| 79.4 | 1 362 | 79.5 | 1 365 | 79.7 | 1 368 | 79.9 | 1 371 | 80.1 | 1 374 | 80.3 | 1 378 | 80.5 | 1 381 | 80.7 | 1 384 | 80.8 | 1 387 | **1 716** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 717 | 78.2 | 1 343 | 78.4 | 1 346 | 78.6 | 1 349 | 78.8 | 1 352 | 78.9 | 1 355 | 79.1 | 1 358 | 79.3 | 1 361 |
| 1 718 | 78.3 | 1 345 | 78.5 | 1 348 | 78.7 | 1 351 | 78.8 | 1 354 | 79.0 | 1 358 | 79.2 | 1 360 | 79.4 | 1 364 |
| 1 719 | 78.4 | 1 348 | 78.6 | 1 351 | 78.7 | 1 354 | 78.9 | 1 357 | 79.1 | 1 360 | 79.3 | 1 363 | 79.5 | 1 366 |
| 1 720 | 78.5 | 1 350 | 78.7 | 1 353 | 78.8 | 1 356 | 79.0 | 1 359 | 79.2 | 1 362 | 79.4 | 1 365 | 79.5 | 1 368 |
| 1 721 | 78.6 | 1 352 | 78.7 | 1 355 | 78.9 | 1 358 | 79.1 | 1 361 | 79.3 | 1 364 | 79.4 | 1 367 | 79.6 | 1 371 |
| 1 722 | 78.6 | 1 354 | 78.8 | 1 357 | 79.0 | 1 360 | 79.2 | 1 364 | 79.4 | 1 367 | 79.5 | 1 370 | 79.7 | 1 373 |
| 1 723 | 78.7 | 1 357 | 78.9 | 1 360 | 79.1 | 1 363 | 79.3 | 1 366 | 79.5 | 1 369 | 79.6 | 1 372 | 79.8 | 1 375 |
| 1 724 | 78.8 | 1 359 | 79.0 | 1 362 | 79.2 | 1 365 | 79.4 | 1 368 | 79.5 | 1 371 | 79.7 | 1 374 | 79.9 | 1 377 |
| 1 725 | 78.9 | 1 361 | 79.1 | 1 364 | 79.3 | 1 367 | 79.5 | 1 371 | 79.6 | 1 374 | 79.8 | 1 377 | 80.0 | 1 380 |
| 1 726 | 79.0 | 1 363 | 79.2 | 1 366 | 79.4 | 1 370 | 79.5 | 1 373 | 79.7 | 1 376 | 79.9 | 1 379 | 80.1 | 1 382 |
| 1 727 | 79.1 | 1 366 | 79.3 | 1 369 | 79.4 | 1 372 | 79.6 | 1 375 | 79.8 | 1 378 | 80.0 | 1 381 | 80.2 | 1 385 |
| 1 728 | 79.2 | 1 368 | 79.3 | 1 371 | 79.5 | 1 374 | 79.7 | 1 377 | 79.9 | 1 381 | 80.1 | 1 384 | 80.3 | 1 387 |
| 1 729 | 79.2 | 1 370 | 79.4 | 1 374 | 79.6 | 1 377 | 79.8 | 1 380 | 80.0 | 1 383 | 80.2 | 1 386 | 80.4 | 1 389 |
| 1 730 | 79.3 | 1 372 | 79.5 | 1 376 | 79.7 | 1 379 | 79.9 | 1 382 | 80.1 | 1 385 | 80.2 | 1 388 | 80.4 | 1 392 |
| 1 731 | 79.4 | 1 375 | 79.6 | 1 378 | 79.8 | 1 381 | 80.0 | 1 384 | 80.2 | 1 388 | 80.3 | 1 391 | 80.5 | 1 394 |
| 1 732 | 79.5 | 1 377 | 79.7 | 1 380 | 79.9 | 1 384 | 80.1 | 1 387 | 80.2 | 1 390 | 80.4 | 1 393 | 80.6 | 1 397 |
| 1 733 | 79.6 | 1 379 | 79.8 | 1 383 | 80.0 | 1 386 | 80.2 | 1 389 | 80.3 | 1 392 | 80.5 | 1 395 | 80.7 | 1 399 |
| 1 734 | 79.7 | 1 382 | 79.9 | 1 385 | 80.1 | 1 388 | 80.2 | 1 391 | 80.4 | 1 395 | 80.6 | 1 398 | 80.8 | 1 401 |
| 1 735 | 79.8 | 1 384 | 80.0 | 1 387 | 80.1 | 1 391 | 80.3 | 1 394 | 80.5 | 1 397 | 80.7 | 1 400 | 80.9 | 1 404 |
| 1 736 | 79.9 | 1 386 | 80.1 | 1 390 | 80.2 | 1 393 | 80.4 | 1 396 | 80.6 | 1 399 | 80.8 | 1 403 | 81.0 | 1 406 |
| 1 737 | 79.9 | 1 389 | 80.1 | 1 392 | 80.3 | 1 395 | 80.5 | 1 398 | 80.7 | 1 402 | 80.9 | 1 405 | 81.1 | 1 408 |
| 1 738 | 80.0 | 1 391 | 80.2 | 1 394 | 80.4 | 1 398 | 80.6 | 1 401 | 80.8 | 1 404 | 81.0 | 1 407 | 81.2 | 1 411 |
| 1 739 | 80.1 | 1 393 | 80.3 | 1 397 | 80.5 | 1 400 | 80.7 | 1 403 | 80.9 | 1 406 | 81.1 | 1 410 | 81.3 | 1 413 |
| 1 740 | 80.2 | 1 396 | 80.4 | 1 399 | 80.6 | 1 402 | 80.8 | 1 406 | 81.0 | 1 409 | 81.2 | 1 412 | 81.4 | 1 416 |
| 1 741 | 80.3 | 1 398 | 80.5 | 1 401 | 80.7 | 1 405 | 80.9 | 1 408 | 81.1 | 1 411 | 81.3 | 1 415 | 81.5 | 1 418 |
| 1 742 | 80.4 | 1 400 | 80.6 | 1 404 | 80.8 | 1 407 | 81.0 | 1 410 | 81.1 | 1 414 | 81.3 | 1 417 | 81.5 | 1 421 |
| 1 743 | 80.5 | 1 403 | 80.7 | 1 406 | 80.9 | 1 409 | 81.1 | 1 413 | 81.2 | 1 416 | 81.4 | 1 419 | 81.6 | 1 423 |
| 1 744 | 80.6 | 1 405 | 80.8 | 1 408 | 80.9 | 1 412 | 81.1 | 1 415 | 81.3 | 1 418 | 81.5 | 1 422 | 81.7 | 1 425 |
| 1 745 | 80.7 | 1 407 | 80.8 | 1 411 | 81.0 | 1 414 | 81.2 | 1 418 | 81.4 | 1 421 | 81.6 | 1 424 | 81.8 | 1 428 |
| 1 746 | 80.7 | 1 410 | 80.9 | 1 413 | 81.1 | 1 417 | 81.3 | 1 420 | 81.5 | 1 423 | 81.7 | 1 427 | 81.9 | 1 430 |
| 1 747 | 80.8 | 1 412 | 81.0 | 1 415 | 81.2 | 1 419 | 81.4 | 1 422 | 81.6 | 1 426 | 81.8 | 1 429 | 82.0 | 1 433 |
| 1 748 | 80.9 | 1 414 | 81.1 | 1 418 | 81.3 | 1 421 | 81.5 | 1 425 | 81.7 | 1 428 | 81.9 | 1 432 | 82.1 | 1 435 |
| 1 749 | 81.0 | 1 417 | 81.2 | 1 420 | 81.4 | 1 424 | 81.6 | 1 427 | 81.8 | 1 431 | 82.0 | 1 434 | 82.2 | 1 438 |
| 1 750 | 81.1 | 1 419 | 81.3 | 1 423 | 81.5 | 1 426 | 81.7 | 1 430 | 81.9 | 1 433 | 82.1 | 1 436 | 82.3 | 1 440 |
| 1 751 | 81.2 | 1 422 | 81.4 | 1 425 | 81.6 | 1 428 | 81.8 | 1 432 | 82.0 | 1 435 | 82.2 | 1 439 | 82.4 | 1 443 |
| 1 752 | 81.3 | 1 424 | 81.5 | 1 428 | 81.7 | 1 431 | 81.9 | 1 435 | 82.1 | 1 438 | 82.3 | 1 442 | 82.5 | 1 445 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 79.5 | 1 364 | 79.6 | 1 367 | 79.8 | 1 371 | 80.0 | 1 374 | 80.2 | 1 377 | 80.4 | 1 380 | 80.6 | 1 383 | 80.7 | 1 386 | 80.9 | 1 390 | **1 717** |
| 79.5 | 1 367 | 79.7 | 1 370 | 79.9 | 1 373 | 80.1 | 1 376 | 80.3 | 1 379 | 80.5 | 1 382 | 80.6 | 1 386 | 80.8 | 1 389 | 81.0 | 1 392 | **1 718** |
| 79.6 | 1 369 | 79.8 | 1 372 | 80.0 | 1 375 | 80.2 | 1 378 | 80.4 | 1 382 | 80.6 | 1 385 | 80.7 | 1 388 | 80.9 | 1 391 | 81.1 | 1 394 | **1 719** |
| 79.7 | 1 371 | 79.9 | 1 374 | 80.1 | 1 378 | 80.3 | 1 381 | 80.5 | 1 384 | 80.6 | 1 387 | 80.8 | 1 390 | 81.0 | 1 394 | 81.2 | 1 397 | **1 720** |
| 79.8 | 1 374 | 80.0 | 1 377 | 80.2 | 1 380 | 80.4 | 1 383 | 80.6 | 1 386 | 80.7 | 1 390 | 80.9 | 1 393 | 81.1 | 1 396 | 81.3 | 1 399 | **1 721** |
| 79.9 | 1 376 | 80.1 | 1 379 | 80.3 | 1 382 | 80.5 | 1 386 | 80.6 | 1 389 | 80.8 | 1 392 | 81.0 | 1 395 | 81.2 | 1 399 | 81.4 | 1 402 | **1 722** |
| 80.0 | 1 378 | 80.2 | 1 381 | 80.4 | 1 385 | 80.6 | 1 388 | 80.7 | 1 391 | 80.9 | 1 394 | 81.1 | 1 398 | 81.3 | 1 401 | 81.5 | 1 404 | **1 723** |
| 80.1 | 1 381 | 80.3 | 1 384 | 80.5 | 1 387 | 80.6 | 1 390 | 80.8 | 1 394 | 81.0 | 1 397 | 81.2 | 1 400 | 81.4 | 1 404 | 81.6 | 1 407 | **1 724** |
| 80.2 | 1 383 | 80.4 | 1 386 | 80.5 | 1 389 | 80.7 | 1 393 | 80.9 | 1 396 | 81.1 | 1 399 | 81.3 | 1 402 | 81.5 | 1 406 | 81.7 | 1 409 | **1 725** |
| 80.3 | 1 385 | 80.4 | 1 389 | 80.6 | 1 392 | 80.8 | 1 395 | 81.0 | 1 398 | 81.2 | 1 402 | 81.4 | 1 405 | 81.6 | 1 408 | 81.8 | 1 412 | **1 726** |
| 80.4 | 1 388 | 80.5 | 1 391 | 80.7 | 1 394 | 80.9 | 1 397 | 81.1 | 1 401 | 81.3 | 1 404 | 81.5 | 1 407 | 81.7 | 1 411 | 81.9 | 1 414 | **1 727** |
| 80.4 | 1 390 | 80.6 | 1 393 | 80.8 | 1 397 | 81.0 | 1 400 | 81.2 | 1 403 | 81.4 | 1 407 | 81.6 | 1 410 | 81.8 | 1 413 | 82.0 | 1 417 | **1 728** |
| 80.5 | 1 393 | 80.7 | 1 396 | 80.9 | 1 399 | 81.1 | 1 402 | 81.3 | 1 406 | 81.5 | 1 409 | 81.7 | 1 412 | 81.9 | 1 416 | 82.1 | 1 419 | **1 729** |
| 80.6 | 1 395 | 80.8 | 1 398 | 81.0 | 1 401 | 81.2 | 1 405 | 81.4 | 1 408 | 81.6 | 1 411 | 81.8 | 1 415 | 82.0 | 1 418 | 82.2 | 1 422 | **1 730** |
| 80.7 | 1 397 | 80.9 | 1 401 | 81.1 | 1 404 | 81.3 | 1 407 | 81.5 | 1 411 | 81.7 | 1 414 | 81.9 | 1 417 | 82.1 | 1 421 | 82.3 | 1 424 | **1 731** |
| 80.8 | 1 400 | 81.0 | 1 403 | 81.2 | 1 406 | 81.4 | 1 410 | 81.6 | 1 413 | 81.8 | 1 416 | 82.0 | 1 420 | 82.2 | 1 423 | 82.4 | 1 427 | **1 732** |
| 80.9 | 1 402 | 81.1 | 1 405 | 81.3 | 1 409 | 81.5 | 1 412 | 81.7 | 1 416 | 81.9 | 1 419 | 82.1 | 1 422 | 82.3 | 1 426 | 82.5 | 1 429 | **1 733** |
| 81.0 | 1 405 | 81.2 | 1 408 | 81.4 | 1 411 | 81.6 | 1 414 | 81.8 | 1 418 | 82.0 | 1 421 | 82.2 | 1 425 | 82.4 | 1 428 | 82.6 | 1 432 | **1 734** |
| 81.1 | 1 407 | 81.3 | 1 410 | 81.5 | 1 414 | 81.7 | 1 417 | 81.9 | 1 420 | 82.1 | 1 424 | 82.3 | 1 427 | 82.5 | 1 431 | 82.7 | 1 434 | **1 735** |
| 81.2 | 1 409 | 81.4 | 1 413 | 81.6 | 1 416 | 81.8 | 1 419 | 82.0 | 1 423 | 82.2 | 1 426 | 82.4 | 1 430 | 82.6 | 1 433 | 82.8 | 1 437 | **1 736** |
| 81.3 | 1 412 | 81.5 | 1 415 | 81.7 | 1 418 | 81.9 | 1 422 | 82.1 | 1 425 | 82.3 | 1 429 | 82.5 | 1 433 | 82.7 | 1 436 | 82.9 | 1 440 | **1 737** |
| 81.4 | 1 414 | 81.6 | 1 418 | 81.8 | 1 421 | 82.0 | 1 424 | 82.2 | 1 428 | 82.4 | 1 431 | 82.6 | 1 435 | 82.8 | 1 439 | 83.0 | 1 442 | **1 738** |
| 81.5 | 1 417 | 81.7 | 1 420 | 81.9 | 1 424 | 82.1 | 1 427 | 82.3 | 1 431 | 82.5 | 1 434 | 82.7 | 1 438 | 82.9 | 1 441 | 83.1 | 1 445 | **1 739** |
| 81.6 | 1 419 | 81.8 | 1 423 | 82.0 | 1 426 | 82.1 | 1 429 | 82.4 | 1 433 | 82.6 | 1 437 | 82.8 | 1 440 | 83.0 | 1 444 | 83.2 | 1 447 | **1 740** |
| 81.6 | 1 422 | 81.8 | 1 425 | 82.0 | 1 428 | 82.2 | 1 432 | 82.4 | 1 435 | 82.7 | 1 439 | 82.9 | 1 443 | 83.1 | 1 446 | 83.3 | 1 450 | **1 741** |
| 81.7 | 1 424 | 81.9 | 1 427 | 82.1 | 1 431 | 82.3 | 1 434 | 82.5 | 1 438 | 82.8 | 1 442 | 83.0 | 1 445 | 83.2 | 1 449 | 83.4 | 1 453 | **1 742** |
| 81.8 | 1 426 | 82.0 | 1 430 | 82.2 | 1 433 | 82.4 | 1 437 | 82.6 | 1 440 | 82.9 | 1 444 | 83.1 | 1 448 | 83.3 | 1 452 | 83.5 | 1 455 | **1 743** |
| 81.9 | 1 429 | 82.1 | 1 432 | 82.3 | 1 436 | 82.5 | 1 439 | 82.7 | 1 443 | 83.0 | 1 447 | 83.2 | 1 450 | 83.4 | 1 454 | 83.6 | 1 458 | **1 744** |
| 82.0 | 1 431 | 82.2 | 1 435 | 82.4 | 1 438 | 82.6 | 1 442 | 82.8 | 1 446 | 83.1 | 1 449 | 83.3 | 1 453 | 83.5 | 1 457 | 83.7 | 1 461 | **1 745** |
| 82.1 | 1 434 | 82.3 | 1 437 | 82.5 | 1 441 | 82.7 | 1 444 | 82.9 | 1 448 | 83.2 | 1 452 | 83.4 | 1 456 | 83.6 | 1 459 | 83.8 | 1 463 | **1 746** |
| 82.2 | 1 436 | 82.4 | 1 440 | 82.6 | 1 444 | 82.8 | 1 447 | 83.0 | 1 451 | 83.3 | 1 455 | 83.5 | 1 458 | 83.7 | 1 462 | 83.9 | 1 466 | **1 747** |
| 82.3 | 1 439 | 82.5 | 1 442 | 82.7 | 1 446 | 82.9 | 1 450 | 83.1 | 1 453 | 83.4 | 1 457 | 83.6 | 1 461 | 83.8 | 1 465 | 84.0 | 1 468 | **1 748** |
| 82.4 | 1 441 | 82.6 | 1 445 | 82.8 | 1 449 | 83.0 | 1 452 | 83.2 | 1 456 | 83.5 | 1 460 | 83.7 | 1 464 | 83.9 | 1 467 | 84.1 | 1 471 | **1 749** |
| 82.5 | 1 444 | 82.7 | 1 447 | 82.9 | 1 451 | 83.1 | 1 455 | 83.3 | 1 458 | 83.6 | 1 462 | 83.8 | 1 466 | 84.0 | 1 470 | 84.2 | 1 474 | **1 750** |
| 82.6 | 1 446 | 82.8 | 1 450 | 83.0 | 1 454 | 83.2 | 1 457 | 83.4 | 1 461 | 83.7 | 1 465 | 83.9 | 1 469 | 84.1 | 1 473 | 84.3 | 1 476 | **1 751** |
| 82.7 | 1 449 | 82.9 | 1 453 | 83.1 | 1 456 | 83.3 | 1 460 | 83.6 | 1 464 | 83.8 | 1 468 | 84.0 | 1 472 | 84.2 | 1 475 | 84.4 | 1 479 | **1 752** |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| 1 753 | 81.4 | 1 426 | 81.6 | 1 430 | 81.8 | 1 433 | 82.0 | 1 437 | 82.2 | 1 440 | 82.4 | 1 444 | 82.6 | 1 448 |
| 1 754 | 81.5 | 1 429 | 81.7 | 1 432 | 81.9 | 1 436 | 82.1 | 1 440 | 82.3 | 1 443 | 82.5 | 1 447 | 82.7 | 1 450 |
| 1 755 | 81.6 | 1 431 | 81.8 | 1 435 | 82.0 | 1 438 | 82.2 | 1 442 | 82.4 | 1 446 | 82.6 | 1 449 | 82.8 | 1 453 |
| 1 756 | 81.6 | 1 434 | 81.9 | 1 437 | 82.1 | 1 441 | 82.3 | 1 444 | 82.5 | 1 448 | 82.7 | 1 452 | 82.9 | 1 455 |
| 1 757 | 81.7 | 1 436 | 81.9 | 1 440 | 82.1 | 1 443 | 82.3 | 1 447 | 82.6 | 1 451 | 82.8 | 1 454 | 83.0 | 1 458 |
| 1 758 | 81.8 | 1 439 | 82.0 | 1 442 | 82.2 | 1 446 | 82.4 | 1 449 | 82.7 | 1 453 | 82.9 | 1 457 | 83.1 | 1 461 |
| 1 759 | 81.9 | 1 441 | 82.1 | 1 445 | 82.3 | 1 448 | 82.5 | 1 452 | 82.7 | 1 455 | 83.0 | 1 459 | 83.2 | 1 463 |
| 1 760 | 82.0 | 1 443 | 82.2 | 1 447 | 82.4 | 1 451 | 82.6 | 1 454 | 82.8 | 1 458 | 83.1 | 1 462 | 83.3 | 1 466 |
| 1 761 | 82.1 | 1 446 | 82.3 | 1 450 | 82.5 | 1 453 | 82.7 | 1 457 | 82.9 | 1 461 | 83.2 | 1 464 | 83.4 | 1 468 |
| 1 762 | 82.2 | 1 448 | 82.4 | 1 452 | 82.6 | 1 456 | 82.8 | 1 459 | 83.0 | 1 463 | 83.3 | 1 467 | 83.5 | 1 471 |
| 1 763 | 82.3 | 1 451 | 82.5 | 1 455 | 82.7 | 1 458 | 82.9 | 1 462 | 83.1 | 1 466 | 83.4 | 1 470 | 83.6 | 1 474 |
| 1 764 | 82.4 | 1 453 | 82.6 | 1 457 | 82.8 | 1 461 | 83.0 | 1 464 | 83.2 | 1 468 | 83.5 | 1 472 | 83.7 | 1 476 |
| 1 765 | 82.5 | 1 456 | 82.7 | 1 459 | 82.9 | 1 463 | 83.1 | 1 467 | 83.3 | 1 471 | 83.6 | 1 475 | 83.8 | 1 479 |
| 1 766 | 82.6 | 1 458 | 82.8 | 1 462 | 83.0 | 1 466 | 83.2 | 1 470 | 83.4 | 1 474 | 83.7 | 1 478 | 83.9 | 1 481 |
| 1 767 | 82.7 | 1 461 | 82.9 | 1 464 | 83.1 | 1 468 | 83.3 | 1 472 | 83.5 | 1 476 | 83.8 | 1 480 | 84.0 | 1 484 |
| 1 768 | 82.8 | 1 463 | 83.0 | 1 467 | 83.2 | 1 471 | 83.4 | 1 475 | 83.6 | 1 479 | 83.9 | 1 483 | 84.1 | 1 487 |
| 1 769 | 82.9 | 1 466 | 83.1 | 1 470 | 83.3 | 1 474 | 83.5 | 1 477 | 83.7 | 1 481 | 84.0 | 1 485 | 84.2 | 1 489 |
| 1 770 | 83.0 | 1 468 | 83.2 | 1 472 | 83.4 | 1 476 | 83.6 | 1 480 | 83.8 | 1 484 | 84.1 | 1 488 | 84.3 | 1 492 |
| 1 771 | 83.1 | 1 471 | 83.3 | 1 475 | 83.5 | 1 479 | 83.7 | 1 483 | 83.9 | 1 487 | 84.2 | 1 491 | 84.4 | 1 495 |
| 1 772 | 83.2 | 1 474 | 83.4 | 1 477 | 83.6 | 1 481 | 83.8 | 1 485 | 84.0 | 1 489 | 84.3 | 1 493 | 84.5 | 1 498 |
| 1 773 | 83.3 | 1 476 | 83.5 | 1 480 | 83.7 | 1 484 | 83.9 | 1 488 | 84.1 | 1 492 | 84.4 | 1 496 | 84.6 | 1 500 |
| 1 774 | 83.4 | 1 479 | 83.6 | 1 483 | 83.8 | 1 487 | 84.0 | 1 491 | 84.3 | 1 495 | 84.5 | 1 499 | 84.7 | 1 503 |
| 1 775 | 83.5 | 1 481 | 83.7 | 1 485 | 83.9 | 1 489 | 84.1 | 1 493 | 84.4 | 1 497 | 84.6 | 1 501 | 84.8 | 1 506 |
| 1 776 | 83.6 | 1 484 | 83.8 | 1 488 | 84.0 | 1 492 | 84.2 | 1 496 | 84.5 | 1 500 | 84.7 | 1 504 | 85.0 | 1 509 |
| 1 777 | 83.7 | 1 487 | 83.9 | 1 491 | 84.1 | 1 495 | 84.3 | 1 499 | 84.6 | 1 503 | 84.8 | 1 507 | 85.1 | 1 512 |
| 1 778 | 83.8 | 1 489 | 84.0 | 1 493 | 84.2 | 1 497 | 84.4 | 1 501 | 84.7 | 1 506 | 84.9 | 1 510 | 85.2 | 1 515 |
| 1 779 | 83.9 | 1 492 | 84.1 | 1 496 | 84.3 | 1 500 | 84.6 | 1 504 | 84.8 | 1 508 | 85.0 | 1 513 | 85.3 | 1 517 |
| 1 780 | 84.0 | 1 494 | 84.2 | 1 499 | 84.4 | 1 503 | 84.7 | 1 507 | 84.9 | 1 511 | 85.2 | 1 516 | 85.4 | 1 520 |
| 1 781 | 84.1 | 1 497 | 84.3 | 1 501 | 84.5 | 1 505 | 84.8 | 1 510 | 85.0 | 1 514 | 85.3 | 1 519 | 85.5 | 1 523 |
| 1 782 | 84.2 | 1 500 | 84.4 | 1 504 | 84.6 | 1 508 | 84.9 | 1 513 | 85.1 | 1 517 | 85.4 | 1 521 | 85.6 | 1 526 |
| 1 783 | 84.3 | 1 503 | 84.5 | 1 507 | 84.8 | 1 511 | 85.0 | 1 516 | 85.2 | 1 520 | 85.5 | 1 524 | 85.8 | 1 529 |
| 1 784 | 84.4 | 1 505 | 84.6 | 1 509 | 84.9 | 1 514 | 85.1 | 1 518 | 85.4 | 1 523 | 85.6 | 1 527 | 85.9 | 1 532 |
| 1 785 | 84.5 | 1 508 | 84.7 | 1 512 | 85.0 | 1 517 | 85.2 | 1 521 | 85.5 | 1 526 | 85.7 | 1 530 | 86.0 | 1 535 |
| 1 786 | 84.6 | 1 511 | 84.8 | 1 515 | 85.1 | 1 520 | 85.3 | 1 524 | 85.6 | 1 529 | 85.9 | 1 533 | 86.1 | 1 538 |
| 1 787 | 84.7 | 1 514 | 84.9 | 1 518 | 85.2 | 1 523 | 85.5 | 1 527 | 85.7 | 1 532 | 86.0 | 1 536 | 86.2 | 1 541 |
| 1 788 | 84.8 | 1 517 | 85.1 | 1 521 | 85.3 | 1 526 | 85.6 | 1 530 | 85.8 | 1 535 | 86.1 | 1 539 | 86.4 | 1 544 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 82.8 | 1 451 | 83.0 | 1 455 | 83.2 | 1 459 | 83.4 | 1 463 | 83.9 | 1 466 | 83.9 | 1 470 | 84.1 | 1 474 | 84.3 | 1 478 | 84.5 | 1 482 | **1 753** |
| 82.9 | 1 454 | 83.1 | 1 458 | 83.3 | 1 461 | 83.5 | 1 465 | 83.8 | 1 469 | 84.0 | 1 473 | 84.2 | 1 477 | 84.4 | 1 481 | 84.6 | 1 485 | **1 754** |
| 83.0 | 1 456 | 83.2 | 1 460 | 83.4 | 1 464 | 83.6 | 1 468 | 83.9 | 1 472 | 84.1 | 1 476 | 84.3 | 1 479 | 84.5 | 1 483 | 84.7 | 1 488 | **1 755** |
| 83.1 | 1 459 | 83.3 | 1 463 | 83.5 | 1 467 | 83.7 | 1 470 | 84.0 | 1 474 | 84.2 | 1 478 | 84.4 | 1 482 | 84.6 | 1 486 | 84.8 | 1 490 | **1 756** |
| 83.2 | 1 462 | 83.4 | 1 466 | 83.6 | 1 469 | 83.8 | 1 473 | 84.1 | 1 477 | 84.3 | 1 481 | 84.5 | 1 485 | 84.7 | 1 489 | 85.0 | 1 493 | **1 757** |
| 83.3 | 1 464 | 83.5 | 1 468 | 83.7 | 1 472 | 83.9 | 1 476 | 84.2 | 1 480 | 84.4 | 1 484 | 84.6 | 1 488 | 84.9 | 1 492 | 85.1 | 1 496 | **1 758** |
| 83.4 | 1 467 | 83.6 | 1 471 | 83.8 | 1 475 | 84.1 | 1 478 | 84.3 | 1 482 | 84.5 | 1 486 | 84.7 | 1 490 | 85.0 | 1 495 | 85.2 | 1 499 | **1 759** |
| 83.5 | 1 469 | 83.7 | 1 473 | 83.9 | 1 477 | 84.2 | 1 481 | 84.4 | 1 485 | 84.6 | 1 489 | 84.9 | 1 493 | 85.1 | 1 498 | 85.3 | 1 502 | **1 760** |
| 83.6 | 1 472 | 83.8 | 1 476 | 84.0 | 1 480 | 84.3 | 1 484 | 84.5 | 1 488 | 84.7 | 1 492 | 85.0 | 1 496 | 85.2 | 1 500 | 85.4 | 1 505 | **1 761** |
| 83.7 | 1 475 | 83.9 | 1 479 | 84.1 | 1 482 | 84.4 | 1 486 | 84.6 | 1 490 | 84.8 | 1 495 | 85.1 | 1 499 | 85.3 | 1 503 | 85.6 | 1 508 | **1 762** |
| 83.8 | 1 477 | 84.0 | 1 481 | 84.2 | 1 485 | 84.5 | 1 489 | 84.7 | 1 493 | 84.9 | 1 497 | 85.2 | 1 502 | 85.4 | 1 506 | 85.7 | 1 511 | **1 763** |
| 83.9 | 1 480 | 84.1 | 1 484 | 84.3 | 1 488 | 84.6 | 1 492 | 84.8 | 1 496 | 85.1 | 1 500 | 85.3 | 1 505 | 85.6 | 1 509 | 85.8 | 1 514 | **1 764** |
| 84.0 | 1 483 | 84.2 | 1 486 | 84.4 | 1 490 | 84.7 | 1 495 | 84.9 | 1 499 | 85.2 | 1 503 | 85.4 | 1 508 | 85.7 | 1 512 | 85.9 | 1 516 | **1 765** |
| 84.1 | 1 485 | 84.3 | 1 489 | 84.5 | 1 491 | 84.8 | 1 497 | 85.0 | 1 502 | 85.3 | 1 506 | 85.5 | 1 511 | 85.8 | 1 515 | 86.0 | 1 519 | **1 766** |
| 84.2 | 1 488 | 84.4 | 1 492 | 84.7 | 1 496 | 84.9 | 1 500 | 85.2 | 1 505 | 85.4 | 1 509 | 85.7 | 1 514 | 85.9 | 1 518 | 86.2 | 1 522 | **1 767** |
| 84.3 | 1 491 | 84.5 | 1 495 | 84.8 | 1 499 | 85.0 | 1 503 | 85.3 | 1 508 | 85.5 | 1 512 | 85.8 | 1 517 | 86.0 | 1 521 | 86.3 | 1 525 | **1 768** |
| 84.4 | 1 493 | 84.7 | 1 497 | 84.9 | 1 502 | 85.1 | 1 506 | 85.4 | 1 511 | 85.6 | 1 515 | 85.9 | 1 519 | 86.1 | 1 524 | 86.4 | 1 529 | **1 769** |
| 84.5 | 1 496 | 84.8 | 1 500 | 85.0 | 1 505 | 85.3 | 1 509 | 85.5 | 1 514 | 85.8 | 1 518 | 86.0 | 1 523 | 86.3 | 1 527 | 86.5 | 1 532 | **1 770** |
| 84.6 | 1 499 | 84.9 | 1 503 | 85.1 | 1 507 | 85.4 | 1 512 | 85.6 | 1 517 | 85.9 | 1 521 | 86.1 | 1 526 | 86.4 | 1 530 | 86.7 | 1 535 | **1 771** |
| 84.7 | 1 502 | 85.0 | 1 506 | 85.2 | 1 510 | 85.5 | 1 515 | 85.7 | 1 519 | 86.0 | 1 524 | 86.3 | 1 529 | 86.5 | 1 533 | 86.8 | 1 538 | **1 772** |
| 84.9 | 1 504 | 85.1 | 1 509 | 85.3 | 1 513 | 85.6 | 1 518 | 85.9 | 1 522 | 86.1 | 1 527 | 86.4 | 1 532 | 86.7 | 1 536 | 86.9 | 1 541 | **1 773** |
| 85.0 | 1 507 | 85.2 | 1 512 | 85.5 | 1 516 | 85.7 | 1 521 | 86.0 | 1 525 | 86.3 | 1 530 | 86.5 | 1 535 | 86.8 | 1 539 | 87.1 | 1 544 | **1 774** |
| 85.1 | 1 510 | 85.3 | 1 515 | 85.6 | 1 519 | 85.8 | 1 524 | 86.1 | 1 528 | 86.4 | 1 533 | 86.6 | 1 538 | 86.9 | 1 543 | 87.2 | 1 548 | **1 775** |
| 85.2 | 1 513 | 85.4 | 1 518 | 85.7 | 1 522 | 86.0 | 1 527 | 86.2 | 1 531 | 86.5 | 1 536 | 86.8 | 1 541 | 87.1 | 1 546 | 87.3 | 1 551 | **1 776** |
| 85.3 | 1 516 | 85.5 | 1 521 | 85.8 | 1 525 | 86.1 | 1 530 | 86.4 | 1 535 | 86.6 | 1 539 | 86.9 | 1 544 | 87.2 | 1 549 | 87.5 | 1 554 | **1 777** |
| 85.4 | 1 519 | 85.7 | 1 524 | 85.9 | 1 528 | 86.2 | 1 533 | 86.5 | 1 538 | 86.7 | 1 542 | 87.0 | 1 547 | 87.3 | 1 553 | 87.6 | 1 557 | **1 778** |
| 85.5 | 1 522 | 85.8 | 1 527 | 86.1 | 1 531 | 86.3 | 1 536 | 86.6 | 1 541 | 86.9 | 1 546 | 87.2 | 1 551 | 87.5 | 1 556 | 87.7 | 1 559 | **1 779** |
| 85.7 | 1 525 | 85.9 | 1 530 | 86.2 | 1 534 | 86.5 | 1 539 | 86.7 | 1 544 | 87.0 | 1 549 | 87.3 | 1 554 | 87.6 | 1 559 | 87.9 | 1 564 | **1 780** |
| 85.8 | 1 528 | 86.0 | 1 533 | 86.3 | 1 537 | 86.6 | 1 542 | 86.9 | 1 547 | 87.2 | 1 552 | 87.4 | 1 557 | 87.7 | 1 562 | 88.0 | 1 567 | **1 781** |
| 85.9 | 1 531 | 86.2 | 1 536 | 86.4 | 1 540 | 86.7 | 1 545 | 87.0 | 1 550 | 87.3 | 1 555 | 87.6 | 1 560 | 87.9 | 1 566 | 88.2 | 1 571 | **1 782** |
| 86.0 | 1 534 | 86.3 | 1 539 | 86.6 | 1 543 | 86.8 | 1 548 | 87.1 | 1 554 | 87.4 | 1 559 | 87.7 | 1 564 | 88.0 | 1 569 | 88.3 | 1 575 | **1 783** |
| 86.1 | 1 537 | 86.4 | 1 542 | 86.7 | 1 546 | 87.0 | 1 552 | 87.3 | 1 557 | 87.6 | 1 562 | 87.9 | 1 567 | 88.1 | 1 572 | 88.5 | 1 578 | **1 784** |
| 86.3 | 1 540 | 86.5 | 1 545 | 86.8 | 1 550 | 87.1 | 1 555 | 87.4 | 1 560 | 87.7 | 1 565 | 87.9 | 1 569 | 88.3 | 1 576 | 88.6 | 1 582 | **1 785** |
| 86.4 | 1 543 | 86.7 | 1 548 | 86.9 | 1 553 | 87.2 | 1 558 | 87.5 | 1 563 | 87.8 | 1 569 | 88.1 | 1 574 | 88.4 | 1 580 | 88.8 | 1 586 | **1 786** |
| 86.5 | 1 546 | 86.8 | 1 551 | 87.1 | 1 556 | 87.4 | 1 562 | 87.7 | 1 567 | 88.0 | 1 572 | 88.3 | 1 578 | 88.6 | 1 583 | 88.9 | 1 589 | **1 787** |
| 86.6 | 1 549 | 86.9 | 1 554 | 87.2 | 1 559 | 87.5 | 1 565 | 87.9 | 1 570 | 88.1 | 1 575 | 88.4 | 1 581 | 88.8 | 1 587 | 89.1 | 1 593 | **1 788** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| **1 789** | 84.9 | 1 519 | 85.2 | 1 524 | 85.4 | 1 528 | 85.7 | 1 533 | 86.0 | 1 538 | 86.2 | 1 542 | 86.5 | 1 547 |
| **1 790** | 85.0 | 1 522 | 85.3 | 1 527 | 85.6 | 1 531 | 85.8 | 1 536 | 86.1 | 1 541 | 86.3 | 1 545 | 86.8 | 1 550 |
| **1 791** | 85.1 | 1 525 | 85.4 | 1 530 | 85.7 | 1 534 | 85.9 | 1 539 | 86.2 | 1 544 | 86.5 | 1 549 | 86.7 | 1 554 |
| **1 792** | 85.3 | 1 528 | 85.5 | 1 553 | 85.8 | 1 537 | 86.0 | 1 542 | 86.3 | 1 547 | 86.6 | 1 552 | 86.9 | 1 557 |
| **1 793** | 85.4 | 1 531 | 85.6 | 1 535 | 85.9 | 1 540 | 86.2 | 1 545 | 86.4 | 1 550 | 86.7 | 1 555 | 87.0 | 1 560 |
| **1 794** | 85.5 | 1 534 | 85.8 | 1 538 | 86.0 | 1 543 | 86.3 | 1 548 | 86.6 | 1 553 | 86.9 | 1 558 | 87.1 | 1 563 |
| **1 795** | 85.6 | 1 537 | 85.9 | 1 541 | 86.1 | 1 546 | 86.4 | 1 551 | 86.7 | 1 556 | 87.0 | 1 561 | 87.3 | 1 567 |
| **1 796** | 85.7 | 1 540 | 86.0 | 1 544 | 86.3 | 1 549 | 86.5 | 1 554 | 86.8 | 1 559 | 87.1 | 1 565 | 87.4 | 1 570 |
| **1 797** | 85.8 | 1 543 | 86.1 | 1 547 | 86.4 | 1 552 | 86.7 | 1 557 | 87.0 | 1 563 | 87.3 | 1 568 | 87.6 | 1 573 |
| **1 798** | 86.0 | 1 546 | 86.2 | 1 551 | 86.5 | 1 555 | 86.8 | 1 561 | 87.1 | 1 566 | 87.4 | 1 571 | 87.7 | 1 577 |
| **1 799** | 86.1 | 1 549 | 86.4 | 1 554 | 86.6 | 1 559 | 86.9 | 1 564 | 87.2 | 1 569 | 87.5 | 1 575 | 87.8 | 1 580 |
| **1 800** | 86.2 | 1 552 | 86.5 | 1 557 | 86.8 | 1 562 | 87.1 | 1 567 | 87.4 | 1 573 | 87.7 | 1 578 | 88.0 | 1 584 |
| **1 801** | 86.3 | 1 555 | 86.6 | 1 560 | 86.9 | 1 565 | 87.2 | 1 570 | 87.5 | 1 576 | 87.8 | 1 582 | 88.1 | 1 587 |
| **1 802** | 86.5 | 1 558 | 86.8 | 1 563 | 87.0 | 1 568 | 87.3 | 1 574 | 87.7 | 1 580 | 87.9 | 1 585 | 88.3 | 1 591 |
| **1 803** | 86.6 | 1 561 | 86.9 | 1 567 | 87.2 | 1 572 | 87.5 | 1 577 | 87.8 | 1 583 | 88.1 | 1 589 | 88.4 | 1 595 |
| **1 804** | 86.7 | 1 564 | 87.0 | 1 570 | 87.3 | 1 575 | 87.6 | 1 581 | 87.9 | 1 586 | 88.3 | 1 592 | 88.6 | 1 598 |
| **1 805** | 86.9 | 1 568 | 87.2 | 1 573 | 87.5 | 1 578 | 87.8 | 1 584 | 88.1 | 1 590 | 88.4 | 1 596 | 88.8 | 1 602 |
| **1 806** | 87.0 | 1 571 | 87.3 | 1 577 | 87.6 | 1 582 | 87.9 | 1 588 | 88.2 | 1 593 | 88.6 | 1 599 | 88.9 | 1 606 |
| **1 807** | 87.1 | 1 574 | 87.4 | 1 580 | 87.7 | 1 585 | 88.1 | 1 591 | 88.4 | 1 597 | 88.7 | 1 603 | 89.1 | 1 610 |
| **1 808** | 87.3 | 1 578 | 87.6 | 1 584 | 87.9 | 1 589 | 88.2 | 1 595 | 88.5 | 1 601 | 88.9 | 1 607 | 89.3 | 1 614 |
| **1 809** | 87.4 | 1 581 | 87.7 | 1 587 | 88.0 | 1 592 | 88.4 | 1 598 | 88.7 | 1 604 | 89.1 | 1 611 | 89.4 | 1 618 |
| **1 810** | 87.5 | 1 584 | 87.9 | 1 590 | 88.2 | 1 596 | 88.5 | 1 602 | 88.9 | 1 608 | 89.2 | 1 615 | 89.6 | 1 622 |
| **1 811** | 87.7 | 1 588 | 88.0 | 1 594 | 88.3 | 1 599 | 88.7 | 1 606 | 89.0 | 1 612 | 89.4 | 1 619 | 89.8 | 1 626 |
| **1 812** | 87.8 | 1 591 | 88.2 | 1 597 | 88.5 | 1 603 | 88.8 | 1 610 | 89.2 | 1 616 | 89.6 | 1 623 | 89.9 | 1 630 |
| **1 813** | 88.0 | 1 595 | 88.3 | 1 601 | 88.6 | 1 607 | 89.0 | 1 614 | 89.4 | 1 620 | 89.7 | 1 627 | 90.1 | 1 634 |
| **1 814** | 88.1 | 1 598 | 88.5 | 1 605 | 88.8 | 1 611 | 89.2 | 1 618 | 89.5 | 1 624 | 89.9 | 1 631 | 90.3 | 1 638 |
| **1 815** | 88.3 | 1 602 | 88.6 | 1 608 | 89.0 | 1 614 | 89.3 | 1 622 | 89.7 | 1 628 | 90.1 | 1 636 | 90.5 | 1 642 |
| **1 816** | 88.4 | 1 606 | 88.8 | 1 612 | 89.1 | 1 619 | 89.5 | 1 626 | 89.9 | 1 633 | 90.3 | 1 640 | 90.7 | 1 647 |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 86.8 | 1 552 | 87.1 | 1 558 | 87.4 | 1 563 | 87.7 | 1 568 | 88.0 | 1 574 | 88.3 | 1 579 | 88.6 | 1 585 | 88.9 | 1 591 | 89.3 | 1 597 | **1 789** |
| 86.9 | 1 555 | 87.2 | 1 561 | 87.5 | 1 566 | 87.8 | 1 572 | 88.1 | 1 577 | 88.4 | 1 583 | 88.7 | 1 588 | 89.1 | 1 595 | 89.4 | 1 601 | **1 790** |
| 87.0 | 1 559 | 87.3 | 1 564 | 87.6 | 1 570 | 87.9 | 1 575 | 88.2 | 1 581 | 88.6 | 1 586 | 88.9 | 1 592 | 89.3 | 1 598 | 89.6 | 1 605 | **1 791** |
| 87.2 | 1 562 | 87.5 | 1 568 | 87.8 | 1 573 | 88.1 | 1 579 | 88.4 | 1 584 | 88.7 | 1 590 | 89.1 | 1 596 | 89.4 | 1 602 | 89.8 | 1 609 | **1 792** |
| 87.3 | 1 565 | 87.6 | 1 571 | 87.9 | 1 577 | 88.2 | 1 582 | 88.5 | 1 588 | 88.9 | 1 594 | 89.2 | 1 600 | 89.6 | 1 606 | 89.9 | 1 613 | **1 793** |
| 87.4 | 1 569 | 87.8 | 1 574 | 88.1 | 1 580 | 88.4 | 1 586 | 88.7 | 1 591 | 89.1 | 1 598 | 89.4 | 1 604 | 89.8 | 1 610 | 90.1 | 1 617 | **1 794** |
| 87.6 | 1 572 | 87.9 | 1 578 | 88.2 | 1 584 | 88.5 | 1 589 | 88.9 | 1 595 | 89.2 | 1 601 | 89.6 | 1 608 | 89.9 | 1 614 | 90.3 | 1 621 | **1 795** |
| 87.7 | 1 576 | 88.0 | 1 581 | 88.4 | 1 587 | 88.7 | 1 593 | 89.0 | 1 599 | 89.4 | 1 605 | 89.7 | 1 612 | 90.1 | 1 618 | 90.5 | 1 625 | **1 796** |
| 87.9 | 1 579 | 88.2 | 1 585 | 88.5 | 1 591 | 88.9 | 1 597 | 89.2 | 1 603 | 89.6 | 1 609 | 89.9 | 1 616 | 90.3 | 1 623 | 90.7 | 1 630 | **1 797** |
| 88.0 | 1 582 | 88.3 | 1 588 | 88.7 | 1 594 | 89.0 | 1 601 | 89.4 | 1 607 | 89.7 | 1 613 | 90.1 | 1 620 | 90.5 | 1 627 | 90.9 | 1 634 | **1 798** |
| 88.2 | 1 586 | 88.5 | 1 592 | 88.9 | 1 598 | 89.2 | 1 604 | 89.5 | 1 611 | 89.9 | 1 617 | 90.3 | 1 624 | 90.7 | 1 631 | 91.1 | 1 639 | **1 799** |
| 88.3 | 1 590 | 88.6 | 1 596 | 89.0 | 1 602 | 89.4 | 1 608 | 89.7 | 1 615 | 90.1 | 1 621 | 90.5 | 1 628 | 90.9 | 1 635 | 91.3 | 1 643 | **1 800** |
| 88.5 | 1 593 | 88.8 | 1 599 | 89.2 | 1 606 | 89.5 | 1 612 | 89.9 | 1 619 | 90.3 | 1 625 | 90.7 | 1 633 | 91.1 | 1 640 | 91.5 | 1 648 | **1 801** |
| 88.6 | 1 597 | 89.0 | 1 603 | 89.3 | 1 610 | 89.7 | 1 616 | 90.1 | 1 623 | 90.4 | 1 630 | 90.8 | 1 637 | 91.3 | 1 645 | 91.7 | 1 652 | **1 802** |
| 88.8 | 1 601 | 89.1 | 1 607 | 89.5 | 1 614 | 89.9 | 1 620 | 90.2 | 1 627 | 90.6 | 1 634 | 91.0 | 1 641 | 91.5 | 1 649 | 91.9 | 1 657 | **1 803** |
| 89.0 | 1 604 | 89.3 | 1 611 | 89.7 | 1 618 | 90.0 | 1 624 | 90.4 | 1 631 | 90.8 | 1 638 | 91.3 | 1 646 | 91.7 | 1 654 | 92.2 | 1 662 | **1 804** |
| 89.1 | 1 609 | 89.5 | 1 615 | 89.8 | 1 622 | 90.2 | 1 629 | 90.6 | 1 636 | 91.0 | 1 643 | 91.5 | 1 651 | 91.9 | 1 659 | 92.4 | 1 668 | **1 805** |
| 89.3 | 1 612 | 89.7 | 1 619 | 90.0 | 1 626 | 90.4 | 1 633 | 90.8 | 1 640 | 91.2 | 1 647 | 91.7 | 1 656 | 92.2 | 1 664 | 92.6 | 1 673 | **1 806** |
| 89.5 | 1 617 | 89.8 | 1 623 | 90.2 | 1 630 | 90.6 | 1 637 | 91.0 | 1 645 | 91.4 | 1 652 | 91.9 | 1 661 | 92.4 | 1 669 | 92.9 | 1 679 | **1 807** |
| 89.6 | 1 621 | 90.0 | 1 627 | 90.4 | 1 634 | 90.8 | 1 642 | 91.2 | 1 649 | 91.7 | 1 657 | 92.1 | 1 668 | 92.6 | 1 675 | 93.2 | 1 684 | **1 808** |
| 89.8 | 1 625 | 90.2 | 1 632 | 90.6 | 1 639 | 91.0 | 1 646 | 91.4 | 1 654 | 91.9 | 1 662 | 92.4 | 1 671 | 92.9 | 1 680 | 93.4 | 1 690 | **1 809** |
| 90.0 | 1 629 | 90.4 | 1 636 | 90.8 | 1 643 | 91.2 | 1 651 | 91.6 | 1 659 | 92.1 | 1 667 | 92.6 | 1 676 | 93.2 | 1 686 | 93.7 | 1 696 | **1 810** |
| 90.2 | 1 633 | 90.6 | 1 640 | 91.0 | 1 648 | 91.4 | 1 655 | 91.9 | 1 664 | 92.4 | 1 672 | 92.9 | 1 682 | 93.4 | 1 692 | 94.0 | 1 703 | **1 811** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.9 | 1 810 |  |
| 90.4 | 1 637 | 90.8 | 1 645 | 91.2 | 1 652 | 91.6 | 1 660 | 92.1 | 1 668 | 92.6 | 1 678 | 93.1 | 1 688 | 93.7 | 1 698 | 94.4 | 1 710 | **1 812** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.7 | 1 807 |  |
| 90.6 | 1 642 | 91.0 | 1 649 | 91.4 | 1 657 | 91.9 | 1 665 | 92.3 | 1 674 | 92.7 | 1 684 | 93.4 | 1 693 | 94.0 | 1 705 | 94.7 | 1 717 | **1 813** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.9 | 1 812 | 99.4 | 1 803 |  |
| 90.8 | 1 646 | 91.2 | 1 654 | 91.6 | 1 662 | 92.1 | 1 671 | 92.6 | 1 679 | 93.1 | 1 690 | 93.7 | 1 700 | 94.4 | 1 712 | 95.1 | 1 725 | **1 814** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 99.7 | 1 809 | 99.2 | 1 799 |  |
| 91.0 | 1 651 | 91.4 | 1 659 | 91.8 | 1 667 | 92.3 | 1 676 | 92.8 | 1 685 | 93.4 | 1 695 | 94.0 | 1 706 | 94.7 | 1 719 | 95.6 | 1 735 | **1 815** |
|  |  |  |  |  |  |  |  |  |  |  |  | 99.9 | 1 813 | 99.4 | 1 805 | 96.8 | 1794 |  |
| 91.2 | 1 655 | 91.6 | 1 664 | 92.1 | 1 672 | 92.5 | 1 681 | 93.1 | 1 691 | 93.7 | 1 701 | 94.3 | 1 713 | 95.1 | 1 727 | 96.2 | 1 747 | **1 816** |
|  |  |  |  |  |  |  |  |  |  |  |  | 99.7 | 1 810 | 99.1 | 1 800 | 96.3 | 1 785 |  |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| **1 817** | 88.6 | 1 609 | 89.0 | 1 616 | 89.3 | 1 623 | 89.7 | 1 630 | 90.1 | 1 637 | 90.5 | 1 644 | 90.9 | 1 652 |
| **1 818** | 88.8 | 1 613 | 89.1 | 1 620 | 89.5 | 1 627 | 89.9 | 1 634 | 90.3 | 1 641 | 90.7 | 1 649 | 91.1 | 1 657 |
| **1 819** | 88.9 | 1 617 | 89.3 | 1 624 | 89.7 | 1 631 | 90.1 | 1 638 | 90.5 | 1 646 | 90.9 | 1 653 | 91.3 | 1 661 |
| **1 820** | 89.1 | 1 621 | 89.5 | 1 628 | 89.8 | 1 635 | 90.3 | 1 643 | 90.7 | 1 650 | 91.1 | 1 658 | 91.6 | 1 666 |
| **1 821** | 89.3 | 1 625 | 89.6 | 1 632 | 90.0 | 1 639 | 90.4 | 1 647 | 90.9 | 1 655 | 91.3 | 1 663 | 91.8 | 1 671 |
| **1 822** | 89.4 | 1 630 | 89.8 | 1 637 | 90.2 | 1 644 | 90.7 | 1 652 | 91.1 | 1 659 | 91.5 | 1 668 | 92.0 | 1 677 |
| **1 823** | 89.6 | 1 634 | 90.0 | 1 641 | 90.4 | 1 648 | 90.9 | 1 656 | 91.3 | 1 664 | 91.8 | 1 673 | 92.3 | 1 682 |
| **1 824** | 89.8 | 1 638 | 90.2 | 1 645 | 90.6 | 1 653 | 91.1 | 1 661 | 91.5 | 1 669 | 92.0 | 1 678 | 92.5 | 1 687 |
| **1 825** | 90.0 | 1 642 | 90.4 | 1 649 | 90.8 | 1 657 | 91.3 | 1 666 | 91.7 | 1 674 | 92.2 | 1 684 | 92.8 | 1 693 |
| **1 826** | 90.2 | 1 646 | 90.6 | 1 654 | 91.0 | 1 662 | 91.5 | 1 671 | 92.0 | 1 680 | 92.5 | 1 689 | 93.1 | 1 699 |
| **1 827** | 90.4 | 1 651 | 90.8 | 1 659 | 91.2 | 1 667 | 91.7 | 1 676 | 92.2 | 1 685 | 92.8 | 1 695 | 93.3 | 1 705 |
| **1 828** | 90.6 | 1 655 | 91.0 | 1 663 | 91.5 | 1 672 | 92.0 | 1 681 | 92.5 | 1 690 | 93.0 | 1 701 | 93.6 | 1 712 |
| **1 829** | 90.8 | 1 660 | 91.2 | 1 668 | 91.7 | 1 677 | 92.2 | 1 686 | 92.7 | 1 696 | 93.3 | 1 707 | 94.0 | 1 719 |
| | | | | | | | | | | | | | 99.9 | 1 827 |
| **1 830** | 91.0 | 1 665 | 91.4 | 1 673 | 91.9 | 1 682 | 92.4 | 1 692 | 93.0 | 1 702 | 93.6 | 1 713 | 94.3 | 1 726 |
| | | | | | | | | | | | | | 99.7 | 1 824 |
| **1 831** | 91.2 | 1 669 | 91.6 | 1 678 | 92.2 | 1 688 | 92.7 | 1 697 | 93.3 | 1 708 | 93.9 | 1 720 | 94.7 | 1 734 |
| | | | | | | | | | | | 99.9 | 1 829 | 99.4 | 1 820 |
| **1 832** | 91.4 | 1 674 | 91.9 | 1 683 | 92.4 | 1 693 | 93.0 | 1 703 | 93.6 | 1 715 | 94.3 | 1 728 | 95.1 | 1 743 |
| | | | | | | | | | | | 99.7 | 1 826 | 99.1 | 1 815 |
| **1 833** | 91.6 | 1 679 | 92.1 | 1 689 | 92.7 | 1 699 | 93.3 | 1 709 | 93.9 | 1 722 | 94.7 | 1 736 | 95.7 | 1 753 |
| | | | | | | | | | 99.9 | 1 831 | 99.4 | 1 821 | 98.7 | 1 808 |
| **1 834** | 91.9 | 1 685 | 92.4 | 1 694 | 92.9 | 1 704 | 93.6 | 1 716 | 94.3 | 1 729 | 95.1 | 1 745 | 96.4 | 1 768 |
| | | | | | | | | | 99.7 | 1 828 | 99.1 | 1 817 | 98.1 | 1 799 |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| 91.4 | 1 660 | 91.8 | 1 669 | 92.3 | 1 677 | 92.8 | 1 687 | 93.4 | 1 697 | 94.0 | 1 708 | 94.7 | 1 721 | 95.6 | 1 737 | | | **1 817** |
| | | | | | | | | | | 99.9 | 1 815 | 99.4 | 1 806 | 98.8 | 1 794 | | | |
| 91.6 | 1 665 | 92.1 | 1 674 | 92.5 | 1 683 | 93.1 | 1 693 | 93.7 | 1 703 | 94.3 | 1 715 | 95.1 | 1 729 | 96.2 | 1 749 | | | **1 818** |
| | | | | | | | | | | 99.7 | 1 812 | 99.1 | 1 802 | 98.2 | 1 785 | | | |
| 91.8 | 1 670 | 92.3 | 1 679 | 92.8 | 1 688 | 93.4 | 1 699 | 94.0 | 1 710 | 94.7 | 1 723 | 95.6 | 1 740 | | | | | **1 819** |
| | | | | | | | | 99.9 | 1 817 | 99.4 | 1 808 | 98.7 | 1 796 | | | | | |
| 92.0 | 1 675 | 92.5 | 1 684 | 93.1 | 1 694 | 93.6 | 1 703 | 94.4 | 1 717 | 95.2 | 1 732 | 96.3 | 1 752 | | | | | **1 820** |
| | | | | | | | | 99.7 | 1 814 | 99.1 | 1 804 | 98.2 | 1 787 | | | | | |
| 92.3 | 1 681 | 92.8 | 1 690 | 93.4 | 1 700 | 94.0 | 1 712 | 94.7 | 1 725 | 95.6 | 1 742 | | | | | | | **1 821** |
| | | | | | | 99.9 | 1 819 | 99.4 | 1 810 | 98.7 | 1 797 | | | | | | | |
| 92.5 | 1 686 | 93.1 | 1 696 | 93.7 | 1 707 | 94.3 | 1 719 | 95.2 | 1 734 | 96.3 | 1 755 | | | | | | | **1 822** |
| | | | | | | 99.6 | 1 815 | 99.1 | 1 805 | 98.1 | 1 787 | | | | | | | |
| 92.8 | 1 692 | 93.4 | 1 702 | 94.0 | 1 714 | 94.7 | 1 727 | 95.7 | 1 744 | | | | | | | | | **1 823** |
| | | | | 99.9 | 1 821 | 99.4 | 1 811 | 98.7 | 1 799 | | | | | | | | | |
| 93.1 | 1 698 | 93.7 | 1 709 | 94.4 | 1 721 | 95.2 | 1 736 | 96.3 | 1 757 | | | | | | | | | **1 824** |
| | | | | 99.7 | 1 818 | 99.1 | 1 807 | 98.1 | 1 789 | | | | | | | | | |
| 93.4 | 1 704 | 94.0 | 1 716 | 94.8 | 1 729 | 95.7 | 1 746 | | | | | | | | | | | **1 825** |
| | | 99.9 | 1 823 | 99.4 | 1 814 | 98.7 | 1 801 | | | | | | | | | | | |
| 93.7 | 1 710 | 94.4 | 1 723 | 95.2 | 1 738 | 96.4 | 1 742 | | | | | | | | | | | **1 826** |
| | | 99.7 | 1 820 | 99.1 | 1 809 | 98.1 | 1 791 | | | | | | | | | | | |
| 94.0 | 1 717 | 94.7 | 1 731 | 95.7 | 1 748 | | | | | | | | | | | | | **1 827** |
| 99.9 | 1 825 | 99.4 | 1 816 | 98.7 | 1 803 | | | | | | | | | | | | | |
| 94.4 | 1 725 | 95.2 | 1 740 | 96.4 | 1 762 | | | | | | | | | | | | | **1 828** |
| 99.7 | 1 822 | 99.1 | 1 811 | 98.1 | 1 793 | | | | | | | | | | | | | |
| 94.7 | 1 733 | 95.7 | 1 750 | | | | | | | | | | | | | | | **1 829** |
| 99.4 | 1 818 | 98.7 | 1 805 | | | | | | | | | | | | | | | |
| 95.2 | 1 742 | 96.4 | 1 764 | | | | | | | | | | | | | | | **1 830** |
| 99.1 | 1 813 | 98.1 | 1 795 | | | | | | | | | | | | | | | |
| 95.7 | 1 752 | | | | | | | | | | | | | | | | | **1 831** |
| 98.8 | 1 806 | | | | | | | | | | | | | | | | | |
| 96.4 | 1 765 | | | | | | | | | | | | | | | | | **1 832** |
| 98.0 | 1 795 | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | **1 833** |
| | | | | | | | | | | | | | | | | | | **1 834** |

### Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].

$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.

$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| $t$ | 10 °C | | 12 °C | | 14 °C | | 16 °C | | 18 °C | | 20 °C | | 22 °C | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $D_t$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ |
| **1 835** | 92.1 | 1 690 | 92.6 | 1 700 | 93.3 | 1 711 | 93.9 | 1 723 | 94.7 | 1 737 | 95.6 | 1 755 | | |
|  |  |  |  |  |  |  | 99.9 | 1 833 | 99.4 | 1 824 | 98.7 | 1 811 | | |
| **1 836** | 92.3 | 1 696 | 92.9 | 1 706 | 93.6 | 1 718 | 94.3 | 1 730 | 95.1 | 1 746 | 96.4 | 1 770 | | |
|  |  |  |  |  |  |  | 99.7 | 1 830 | 99.1 | 1 819 | 98.1 | 1 801 | | |
| **1 837** | 92.6 | 1 701 | 93.2 | 1 712 | 93.9 | 1 725 | 94.6 | 1 739 | 95.6 | 1 756 | | | | |
|  |  |  |  |  | 99.9 | 1 836 | 99.4 | 1 826 | 98.7 | 1 813 | | | | |
| **1 838** | 92.9 | 1 707 | 93.5 | 1 719 | 94.3 | 1 732 | 95.1 | 1 748 | 96.3 | 1 770 | | | | |
|  |  |  |  |  | 99.7 | 1 832 | 99.1 | 1 821 | 98.1 | 1 803 | | | | |
| **1 839** | 93.2 | 1 713 | 93.9 | 1 726 | 94.7 | 1 741 | 95.6 | 1 758 | | | | | | |
|  |  |  | 100.0 | 1 838 | 99.4 | 1 829 | 98.7 | 1 814 | | | | | | |
| **1 840** | 93.5 | 1 720 | 94.2 | 1 733 | 95.1 | 1 749 | 96.3 | 1 772 | | | | | | |
|  |  |  | 99.7 | 1 835 | 99.1 | 1 824 | 98.1 | 1 804 | | | | | | |
| **1 841** | 93.8 | 1 727 | 94.6 | 1 742 | 95.2 | 1 760 | | | | | | | | |
|  | 100.0 | 1 841 | 99.5 | 1 831 | 98.7 | 1 817 | | | | | | | | |
| **1 842** | 94.2 | 1 735 | 95.0 | 1 750 | 96.3 | 1 773 | | | | | | | | |
|  | 99.7 | 1 837 | 99.1 | 1 826 | 98.1 | 1 807 | | | | | | | | |
| **1 843** | 94.6 | 1 743 | 95.6 | 1 761 | | | | | | | | | | |
|  | 99.5 | 1 833 | 98.7 | 1 820 | | | | | | | | | | |
| **1 844** | 95.0 | 1 753 | 96.3 | 1 776 | | | | | | | | | | |
|  | 99.2 | 1 829 | 98.2 | 1 810 | | | | | | | | | | |
| **1 845** | 95.6 | 1 763 | | | | | | | | | | | | |
|  | 98.8 | 1 823 | | | | | | | | | | | | |
| **1 846** | 96.2 | 1 776 | | | | | | | | | | | | |
|  | 98.3 | 1 814 | | | | | | | | | | | | |

## Table 1 — Density-composition table for aqueous solutions of sulphuric acid

$D_t$ is the density (mass per unit volume) of solution (in kg/m³) at a temperature $t$ (in °C) [for many purposes it can be assumed that irrespective of the value of $t$ the reading of a BS density hydrometer at $t$ gives the density $D_t$, and that the reading of a 60/60 °F relative density hydrometer at $t$ is numerically 0.001 greater than $D_{t/1000}$ (see Appendix A)].
$g$ is the mass (in g) of $H_2SO_4$ in 100 g mass of solution.
$G$ is the mass (in g) of $H_2SO_4$ in a quantity of solution occupying 1 L at the temperature stated at the head of the column.

| 24 °C | | 26 °C | | 28 °C | | 30 °C | | 32 °C | | 34 °C | | 36 °C | | 38 °C | | 40 °C | | $t$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $g$ | $G$ | $D_t$ |
| | | | | | | | | | | | | | | | | | | 1 835 |
| | | | | | | | | | | | | | | | | | | 1 836 |
| | | | | | | | | | | | | | | | | | | 1 837 |
| | | | | | | | | | | | | | | | | | | 1 838 |
| | | | | | | | | | | | | | | | | | | 1 839 |
| | | | | | | | | | | | | | | | | | | 1 840 |
| | | | | | | | | | | | | | | | | | | 1 841 |
| | | | | | | | | | | | | | | | | | | 1 842 |
| | | | | | | | | | | | | | | | | | | 1 843 |
| | | | | | | | | | | | | | | | | | | 1 844 |
| | | | | | | | | | | | | | | | | | | 1 845 |
| | | | | | | | | | | | | | | | | | | 1 846 |

## Appendix A Correction of readings taken on BS hydrometers

For many purposes it may be assumed that a reading taken at a temperature $t$ (in °C) on a BS density hydrometer gives the density of the liquid $D_t$ (in kg/m³) at $t$.

When a relative density hydrometer is used in a liquid at $t$ the reading may be assumed to give the relative density of the liquid at $t$ relative to water at 60 °F. Multiplying the readings thus obtained by 1 000 and applying the correction given in Table 2 will convert the reading to $D_t$ (in kg/m³) at $t$ before entering Table 1.

**Table 2 — Corrections to be applied to obtain density at $t$**

| Relative density $t/60$ °F × 1 000 | Correction to give density at $t$ |
|---|---|
| | kg/m³ |
| 1 000 | − 1.0 |
| 1 100 | − 1.1 |
| 1 200 | − 1.2 |
| 1 300 | − 1.3 |
| 1 400 | − 1.4 |
| 1 500 | − 1.5 |
| 1 600 | − 1.6 |
| 1 700 | − 1.7 |
| 1 800 | − 1.8 |
| 1 900 | − 1.9 |
| NOTE    The sign being negative the quantity noted is to be subtracted to obtain the density at $t$. | |

Occasions may however arise when greater accuracy is necessary. Additional corrections can then be applied for:

a) the scale error of the hydrometer;

b) the difference between the temperature of the liquid and the standard temperature of the hydrometer;

c) the difference between the surface tension of the liquid and that for which the hydrometer is adjusted.

These corrections are considered in detail as follows.

1) *Corrections for scale errors.* The maximum permissible errors allowed on BS hydrometers are given in Table 7. When these errors are too large to be ignored hydrometers furnished with National Measurement Accreditation Service certificates of calibration should be obtained and the corrections given thereon should be applied.

2) *Temperature corrections.* When the hydrometer reading is taken at a temperature $t$ other than the standard temperature $t_s$ (20 °C or 15 °C) then the reading is in error due to the difference in the volume of the hydrometer between $t_s$ and $t$.

Appropriate corrections for making allowance for this temperature effect are given in Table 3.

**Table 3 — Temperature corrections for BS hydrometers**

| Standard temperature $t_s$ of hydrometer | | Hydrometer reading at temperature $t$ | | | | | |
|---|---|---|---|---|---|---|---|
| 20 °C | 15 °C | 1 000 | 1 200 | 1 400 | 1 600 | 1 800 | 2 000 |
| Temperature $t$ of liquid | | Correction (0.1 kg/m³) | | | | | |
| °C | °C | | | | | | |
| 10 | 5 | + 3 | + 3 | + 4 | + 4 | + 5 | + 5 |
| 15 | 10 | + 1 | + 2 | + 2 | + 2 | + 2 | + 3 |
| 20 | 15 | 0 | 0 | 0 | 0 | 0 | 0 |
| 25 | 20 | − 1 | − 2 | − 2 | − 2 | − 2 | − 3 |
| 30 | 25 | − 3 | − 3 | − 4 | − 4 | − 5 | − 5 |
| 35 | 30 | − 4 | − 5 | − 5 | − 6 | − 7 | − 8 |
| 40 | 35 | − 5 | − 6 | − 7 | − 8 | − 9 | − 10 |
| | 40 | − 6 | − 8 | − 9 | − 10 | − 11 | − 13 |

NOTE 1   When the sign is positive the correction is to be added to the hydrometer reading and when negative to be subtracted from it.

NOTE 2   Table 3 is based on the value 0.000 025 per degree Celsius for the coefficient of cubical expansion of the hydrometer.

3) *Surface tension corrections*

i) *For hydrometers that are used in an overflow vessel so as to ensure that the acid surface is truly clean.* Using this means the highest accuracy can be achieved.

Values of the surface tensions of clean surfaces of aqueous solutions of sulphuric acid at 20 °C are given in Table 4. These are derived from data given in the International Critical Tables (1928) Vol. IV, page 464. It is unlikely that the values at other temperatures over the range 10 °C to 40 °C differ by more than 4 mN/m from the values at 20 °C.

**Table 4 — Surface tensions of aqueous solutions of sulphuric acid at 20 °C**

| $H_2SO_4$ in 100 g of solution | Surface tension of solution at 20 °C | $H_2SO_4$ in 100 g of solution | Surface tension of solution at 20 °C |
|---|---|---|---|
| g | mN/m | g | mN/m |
| 0 | 73 | 55 | 76 |
| 5 | 73 | 60 | 76 |
| 10 | 73 | 65 | 75 |
| 15 | 74 | 70 | 74 |
| 20 | 74 | 75 | 73 |
| 25 | 75 | 80 | 71 |
| 30 | 76 | 85 | 69 |
| 35 | 76 | 90 | 63 |
| 40 | 77 | 95 | 58 |
| 45 | 77 | 100 | 52 |
| 50 | 77 | | |

when the highest accuracy is required hydrometers adjusted for the high surface tension value 75 mN/m should be used for sulphuric acid solutions having densities in the range 1 000 kg/m³ to 1 800 kg/m³, and hydrometers adjusted for the medium surface tension value 55 mN/m should be used for solutions having densities above 1 800 kg/m³. An indication of possible errors, in the form of corrections, which may be applied on account of the difference between the surface tension of the sulphuric acid solution and the surface tension for which the hydrometer is graduated is given in Table 8 of BS 718:1979.

It should be observed that it is of little advantage to apply these surface tension corrections unless corrections for scale errors and temperature are also applied.

ii) *For hydrometers used without special precautions for obtaining a clean acid surface.* In these circumstances the surface tensions of aqueous solutions are usually less than the surface tension values given in Table 4 for clean surfaces. Also, since the values depend to a great extent on the degree of contamination of the surface, the effective surface tension is erratic. Hence, when using ordinary hydrometer jars without overflow, it is not possible to assign a reliable value to the surface tension of the acid solution without measuring it. Under these conditions surface tension corrections are usually ignored. It may, however, be assumed that under ordinary conditions of cleanliness the values lie between 40 mN/m and 70 mN/m. It is therefore appropriate to use a BS hydrometer adjusted for 55 mN/m. The error then introduced by ignoring surface tension is unlikely to exceed the values given in Table 5.

**Table 5 — Maximum errors introduced by ignoring surface tension when reading BS hydrometers, adjusted for 55 mN/m, in aqueous solutions of sulphuric acid in an ordinary hydrometer jar**

| Density of acid solution (in kg/m³) | BS hydrometers adjusted for 55 mN/m | | | | |
| --- | --- | --- | --- | --- | --- |
| | **L20** | **L50** | **M50** | **M100** | **S50** |
| | Maximum error (kg/m³) | | | | |
| 1 000 to 1 850 | $\pm$ 0.2 | $\pm$ 0.3 | $\pm$ 0.5 | $\pm$ 0.9 | $\pm$ 0.8 |

It is of interest to examine the overall effect of ignoring corrections under a), b) and c) when using BS hydrometers adjusted for the medium surface tension value. In Table 6 the hydrometers are assumed to be floating in sulphuric acid solution of density between 1 000 kg/m³ to 1 850 kg/m³ at a temperature differing by $\pm$ 10 degrees Celsius from the standard temperature of the hydrometer.

**Table 6 — Maximum errors due to omission of all corrections to BS hydrometers adjusted for 55 mN/m**

| Series | L20 | L50 | M50 | M100 | S50 |
| --- | --- | --- | --- | --- | --- |
| Value of one sub-division (kg/m³) | 0.2 | 0.5 | 1.0 | 2.0 | 2.0 |
| | kg/m³ | kg/m³ | kg/m³ | kg/m³ | kg/m³ |
| a) Maximum permissible scale corrections | $\pm$ 0.2 | $\pm$ 0.5 | $\pm$ 1.0 | $\pm$ 2.0 | $\pm$ 2.0 |
| b) Temperature corrections for $\pm$ 10 °C | $\pm$ 0.5 | $\pm$ 0.5 | $\pm$ 0.5 | $\pm$ 0.5 | $\pm$ 0.5 |
| c) Maximum estimated surface tension corrections | $\pm$ 0.2 | $\pm$ 0.3 | $\pm$ 0.5 | $\pm$ 0.9 | $\pm$ 0.8 |
| Maximum value of total corrections | $\pm$ 0.9 | $\pm$ 1.3 | $\pm$ 2.0 | $\pm$ 3.4 | $\pm$ 3.3 |
| Error in grams is determined strength of solution of density 1 400 kg/m³ at 30 °C (51.3 g of $H_2SO_4$ per 100 g of solution or 718 g of $H_2SO_4$ per 1 L of solution) corresponding to total corrections above. | | | | | |
| | g | g | g | g | g |
| $H_2SO_4$ in 100 g of solution | $\pm$ 0.1 | $\pm$ 0.1 | $\pm$ 0.2 | $\pm$ 3 | $\pm$ 3 |
| $H_2SO_4$ in 1 L of solution | $\pm$ 2 | $\pm$ 3 | $\pm$ 3 | $\pm$ 7 | $\pm$ 7 |
| NOTE   It is assumed above that a BS density hydrometer was used. If a relative density hydrometer had been used without correction from Table 2, the errors resulting from the neglect of *all corrections*, would be between the values, in grams, given below. | | | | | |
| | g | g | g | g | g |
| $H_2SO_4$ in 100 g of solution | 0 <br> + 0.2 | 0 <br> + 0.3 | − 0.1 <br> + 0.3 | − 0.2 <br> + 0.5 | − 0.2 <br> + 0.5 |
| $H_2SO_4$ in 1 L of solution | + 1 <br> + 5 | 0 <br> + 5 | − 1 <br> + 7 | − 4 <br> + 10 | − 4 <br> + 9 |

**Example of application of hydrometer corrections**

Hydrometer used: density hydrometer L50 range 1 750 kg/m$^3$ to 1 800 kg/m$^3$ at 20 °C adjusted for 75 mN/m, ascertained scale error + 0.5 kg/m$^3$ (i.e. maximum permissible positive error).

| | |
|---|---|
| Temperature of acid solution | 27 °C |
| Uncorrected hydrometer reading using overflow technique | 1 772 kg/m$^3$ |

*Corrections*

| | |
|---|---|
| For scale error | – 0.5 kg/m$^3$ |
| For temperature (from Table 3) | – 0.4 kg/m$^3$ |
| For surface tension (from Table 4 and from Table 8 of BS 718:1979) | – 0.1 kg/m$^3$ |
| Then density of acid solution at 27 °C | 1 771 kg/m$^3$ |

By interpolation in Table 1 a solution of density 1 771.0 kg/m$^3$ at 27 °C contains 85.0 g of H$_2$SO$_4$ in 100 g of solution and 1 L of solution contains 1 505 g of H$_2$SO$_4$.

If the corrections for scale error, temperature and surface tension had been ignored, the values would have been 85.1 g and 1 508 g respectively.

## Appendix B BS hydrometers available for use in conjunction with the tables

BS 718 affords a choice of hydrometers suitable for use in aqueous solutions of sulphuric acid. They may have scales of density at 20 °C or 15 °C.

The choice of the hydrometer series will depend on the accuracy required and the amount of the solution available. Table 7 gives the essential features of the various series of instruments suitable for aqueous solutions.

To use the hydrometers given in Table 7 to the best advantage (see Appendix A) it is recommended that they should be used in an overflow vessel as described in BS 718. Hydrometers adjusted for the high surface tension value 75 mN/m should be used for sulphuric acid solutions having densities in the range 1 000 kg/m$^3$ to 1 800 kg/m$^3$ and hydrometers adjusted for the medium surface tension value 55 mN/m should be used for solutions having densities above 1 800 kg/m$^3$. If considered necessary, adjustments for the surface tension of the acid solution may also be made.

For work of lower accuracy hydrometers adjusted for the medium surface tension category (55 mN/m) may be used without adopting the overflow technique (see Table 5).

## Appendix C Examples of the use of Table 1 in conjunction with BS hydrometers

NOTE   In these examples it has been assumed that either:
   a) the readings on BS density hydrometers (or relative density hydrometers corrected to read density) have been corrected as described in Appendix A; or
   b) the corrections are not significant to the accuracy required.
The hydrometer readings are therefore assumed to indicate the density of the acid solution (in kg/m$^3$) at the temperature determination.

**C.1 To determine the strength of an aqueous solution of sulphuric acid**

Suppose that the temperature of the solution is 28 °C and the density at that temperature (see note) is 1 806 kg/m$^3$. Then in Table 1 under the temperature 28 °C and opposite $D_t$ = 1 896 will be found $g$ = 90.0 and $G$ = 1 626, indicating that the solution contains 90.0 g of H$_2$SO$_4$ in 100 g of solution and 1 626 g of H$_2$SO$_4$ in 1 L of solution at 28 °C.

Suppose that the temperature of the solution is 16 °C and the density at that temperature is 1 839 kg/m$^3$. Then from Table 1 the solution contains either 95.6 g of H$_2$SO$_4$ in 100 g of solution or 98.7 g of H$_2$SO$_4$ in 100 g of solution. Which of the two is correct can be settled by cautiously adding some of the solution to a little water. If this results in an increase of density, the original solution was the more concentrated of the two possible strengths, and vice versa.

### Table 7 — BS Hydrometers available for use in aqueous solutions of sulphuric acid

| Series | Maximum total length | Nominal range of each hydrometer | | Number of scale divisions and value of the scale interval | | Minimum scale length (nominal range) | Bulb diameter | | Volume below lowest graduation line of nominal range | | Extension of scale at each and beyond upper and lower nominal limits | Maximum permitted error at any point on the scale |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | min. | max. | min. | max. | | |
| | mm | kg/m³ | g/mL | kg/m³ | g/mL | mm | mm | mm | mL | mL | | kg/m³ |
| L20 | 335 | 20 | 0.020 | 100 × 0.2 | 100 × 0.000 2 | 105 | 36 | 40 | 108 | 132 | 5 to 10 | ± 0.2 |
| L50 | 335 | 50 | 0.050 | 100 × 0.5 | 100 × 0.000 5 | 125 | 23 | 27 | 50 | 65 | 2 to 5 | ± 0.5 |
| M50 | 270 | 50 | 0.050 | 50 × 1 | 50 × 0.001 | 70 | 20 | 24 | 30 | 45 | 2 to 5 | ± 1.0 |
| M100 | 250 | 100 | 0.100 | 50 × 2 | 50 × 0.002 | 85 | 18 | 20 | 18 | 26 | 2 to 5 | ± 2.0 |
| S50 | 190 | 50 | 0.050 | 25 × 2 | 25 × 0.002 | 50 | 18 | 20 | 18 | 26 | 2 to 3 | ± 2.0 |

### C.2 To make up a solution containing 4.7 g of $H_2SO_4$ in 100 g of solution

In Table 1 under $t$ = 20 °C the value of $D_t$ corresponding to $g$ = 4.7 g is 1 030 kg/m$^3$. Concentrated acid should therefore be added to an appropriate quantity of water[2], in small quantities at a time, with thorough mixing and avoidance of an undue rise in temperature, the density of the diluted acid being checked with a BS hydrometer during the dilution until the hydrometer indicates that the density is approaching 1 030 kg/m$^3$. At this stage and before making the final adjustment, the temperature of the solution is taken. Suppose it is 30 °C; then from Table 1 the value of $D_t$ corresponding to $g$ = 4.7 g in the column headed 30 °C is 1 026 kg/m$^3$. The solution at 30 °C should therefore be adjusted so that a BS hydrometer indicates that its density is 1 026 kg/m$^3$ (see note). The solution thus obtained will contain 4.7 g of $H_2SO_4$ in 100 g of solution.

### C.3 To make up a solution containing 678 g of $H_2SO_4$ in 1 L of solution at 20 °C

From Table 1 under the heading 20 °C it is found that a solution containing 678 g of $H_2SO_4$ per litre has 49.0 g of $H_2SO_4$ per 100 g of solution. Therefore the required solution is made up as in **C.2** using $g$ = 49.0.

---

[2] The appropriate proportions of acid and water can be roughly calculated beforehand if the strength of the concentrated acid is known. For example, suppose that concentrated acid containing approximately 96 g of $H_2SO_4$ in 100 g of acid is used. From Table 1, 1 L of the concentrated acid at 20 °C contains 1 763 g of $H_2SO_4$. Also from Table 1, 1 L of solution containing 4.7 g of

$H_2SO_4$ in 100 g of solution contains 49 g of $H_2SO_4$ per litre at 20 °C. Now 49 g will be contained in $\frac{49 \times 1000}{1763}$ mL, i.e. 27.7 mL, of

concentrated acid. Therefore 27.7 mL of the concentrated acid are required to make up 1 L of the solution containing 49 g of $H_2SO_4$ per litre, i.e. 4.7 g of $H_2SO_4$ per 100 g of solution. The volume of water required will be roughly 1 000 − 27.7 mL = 970 mL.

*blank*

# Publications referred to

BS 718, *Specification for density hydrometers.*

BS 733, *Pyknometers*[3].

ISO 650, *Relative density 60/60 °F hydrometers for general purposes*[3].

ISO 911, *Sulphuric acid for industrial use — Evaluation of sulphuric acid concentration by measurement of density*[3].

ISO 1768, *Glass hydrometers — Conventional value for the thermal cubic expansion coefficient (for use in the preparation of measurement tables for liquids)*[3].

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[3] Referred to in the foreword only.

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