



Standard Guide for Care Symbols for Care Instructions on Textile Products¹

This standard is issued under the fixed designation D 5489; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This guide provides a uniform system of symbols for the disclosure of care instructions on textile products such as apparel, piece goods, and household and institutional articles, hereinafter referred to as “textile,” or “textile product.”

1.2 This guide provides a comprehensive system of symbols to represent care instructions in order to reduce language-dependent care instructions.

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

D 123 Terminology Relating to Textile Materials²

D 3136 Terminology Relating to Care Labels for Textile and Leather Products Other than Textile Floor Coverings and Upholstery²

D 3938 Guide for Determining or Confirming Care Instructions for Apparel and Other Textile Products³

2.2 ASTM Adjunct:

Care Symbol Chart⁴

2.3 AATCC Standard:

A Glossary of AATCC Standard Terminology, Current Edition⁵

2.4 Other Standards:

Federal Trade Commission Amendment to Trade Regulation Rule Concerning Care Labeling of Textile Wearing Apparel, and Certain Piece Goods, *Federal Register*, Vol

48, No. 99, May 20, 1983 (cited as 16 CFR 423).⁶

The National Standard of Canada —Care Labelling of Textiles (CAN/CGSB-86.1-M91)⁷

3. Terminology

3.1 *Definitions*—For definitions of terms related to care labeling, refer to Terminology D 3136. For definitions of other textile terms used in this guide, refer to Terminology D 123.

3.1.1 *care instructions, n—in textiles*, a series of directions that describe practices which should refurbish a product without adverse effects, and that warn against any part of the directions which one could reasonably be expected to use that may harm the item. **D3136**

3.1.2 *care label, n—in textiles*, a label or other affixed instructions that report how a product should be refurbished.

3.1.2.1 *Discussion*—The Federal Trade Commission, in Rule 16 CFK 423, requires care instructions on most apparel and certain other textile items. In relation to these products, the FTC definition states: “Care Label means a permanent label or tag, containing regular care information and instruction, that is attached or affixed in some manner that will not become separated from the product and will remain legible during the useful life of the product.” **D3136**

3.1.3 *care symbol, n*—a pictorial symbol that gives directions for refurbishing a consumer textile product.

4. Significance and Use

4.1 This guide provides symbols and a system for their use by which care instructions for textile products can be conveyed in a simple, space-saving, and easily understood pictorial format that is not language dependent.

4.2 Care symbols are an important means for identifying the appropriate care procedure for home laundering, commercial laundering, professional textile care, and coin-operated dry-cleaning, of textile products.

4.3 Care labeling using symbols can be used by the purchaser to select textiles on the basis of the care method required without knowledge of the language.

4.4 In countries in which a word-based care labeling system

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² *Annual Book of ASTM Standards*, Vol 07.01.

³ *Annual Book of ASTM Standards*, Vol 07.02.

⁴ An adjunct is available from ASTM International Headquarters. Request PCN ADJD5489.

⁵ *Annual AATCC Technical Manual*, available from the American Association of Textile Chemists and Colorists, P.O. Box 12215, Research Triangle Park, NC 27709.

⁶ Available from U.S. Government Printing Office, North Capital and H Streets, NW, Washington, DC 20401.

⁷ Available from CGSB, Sales Unit, Ottawa, Canada. (819) 956-0425 or (819) 956-0426.

is required, the care symbol system may be used as a supplemental system.

4.5 The word-based instructions for each symbol in this guide are harmonious with Terminology D 123, and D 3136, the United States Federal Trade Commission Care Labeling Rule, 16 CFR 423 and industry practice (see Figs. 1 and 2).

4.6 The care label symbol system is based on five basic care symbols representing five operations: washing, bleaching, drying, ironing, and professional textile care.

4.7 One color is used for all care symbols in this care labeling system.

NOTE 1—While this symbol system uses one color, it is harmonious with tri-color systems such as the Canadian system because the instructions are clear whether printed in one or three colors.

4.8 This guide does not specify the type of label material or fabric to use. However, appropriateness for consumer comfort is recommended.

5. Procedure

5.1 Introduction—This section defines the basic symbols and prohibitive symbols: the washing, bleaching, drying, ironing, and professional textile care processes; the required number and order of symbols; supplementary care information; and appropriate instructions and labels.

5.2 Basic Symbols:

5.2.1 There are five basic symbols: the washtub, triangle, square, iron, and circle.

5.2.2 The washtub represents the washing process, the

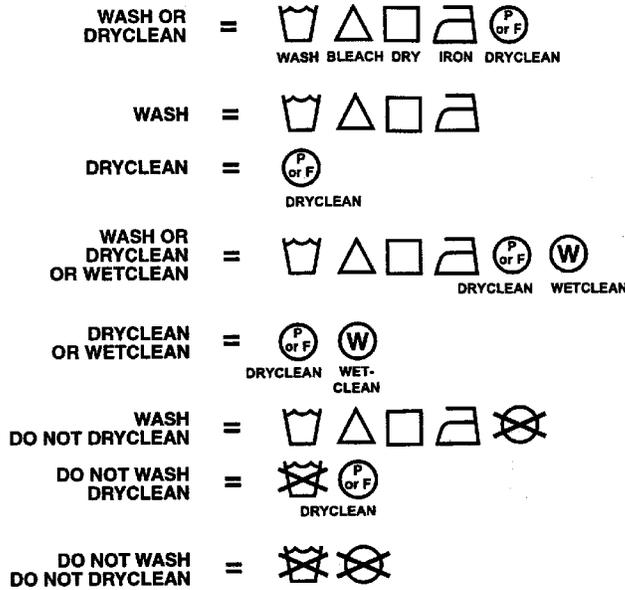
ASTM GUIDE TO CARE SYMBOLS																						
 Wash	Machine wash Cycles & Water temperatures (maximum) symbol (s) dots & °C.	 normal  permanent press  delicate / gentle	 hand wash	Warning symbols for laundering  do not wash  do not bleach  do not dry (used with do not wash)  do not iron																		
	<table border="1"> <tr> <td>(200F)</td> <td>(160F)</td> <td>(140F)</td> <td>(120F)</td> <td>(105F)</td> <td>(65F-85F)</td> </tr> <tr> <td>95</td> <td>70</td> <td>60</td> <td>50</td> <td>40</td> <td>30</td> </tr> <tr> <td>•••••</td> <td>••••</td> <td>•••</td> <td>•••</td> <td>••</td> <td>•</td> </tr> </table>	(200F)	(160F)	(140F)	(120F)	(105F)	(65F-85F)	95	70	60	50	40	30	•••••	••••	•••	•••	••	•			
(200F)	(160F)	(140F)	(120F)	(105F)	(65F-85F)																	
95	70	60	50	40	30																	
•••••	••••	•••	•••	••	•																	
 Bleach	Bleach when needed	 any bleach  only non-chlorine/ oxygen bleach																				
	 Dry	Tumble dry Cycles & Heat settings	 normal  permanent press  delicate / gentle  any heat  high  medium  low  no heat/ air	 line dry / hang to dry  drip dry  dry flat	Additional instructions (in symbols or words)  do not wring  do not tumble dry  in the shade (added to line dry, drip dry, or dry flat)  no steam (added to iron)																	
 Iron		Iron when needed dry or steam Heat settings	 high  medium  low																			
	 Professional Textile Care	Dryclean normal cycle   tetrachloroethylene or petroleum solvent petroleum solvent only	mild cycle  	Do not dryclean 	Wetclean normal mild very mild   	Do not wetclean 																

NOTE—This figure illustrates the symbols to use for laundering and drycleaning instructions. As a minimum, laundering instructions shall include, in order, four symbols: washing, bleaching, drying, and ironing; and, professional textile care instructions shall include one symbol. Additional symbols or words may be used to clarify the instructions.

FIG. 1 Commercial and Home Laundering and Professional Textile Care Symbols

GUIDE TO ORDER OF ASTM CARE SYMBOLS

The care instruction symbols shall be in the following order:



Examples of care instructions:

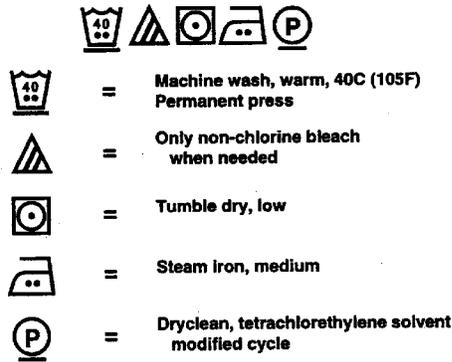


FIG. 2 Guide to Order of ASTM Care Symbols

triangle represents the bleaching process, the square represents the drying process, the iron represents the ironing or pressing process, and the circle represents the professional textile care process (Fig. 3).

5.3 *Prohibitive Symbols*—The prohibitive “X” symbol may be used only when evidence can be provided that the care procedure on which it is superimposed would adversely change the dimensions, hand, appearance, or performance of the textile. (Fig. 4).

5.4 *The Washing Process—The Washtub Symbol:*

5.4.1 The washtub with a water wave represents the washing process in a home laundering or commercial laundering setting.

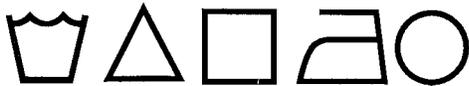


FIG. 3 Basic Symbols



FIG. 4 Prohibitive Symbols

5.4.1.1 The washtub without a water wave may be used to present the washing process.

NOTE 2—The washtub without a water wave is used in the Canadian care symbol system.

5.4.2 Additional symbols inside the washtub indicate the suggested water temperature and hand-washing process.

5.4.3 Additional symbols below the tub indicate the permanent press cycle (one underline, minus sign, or bar) and delicate-gentle washing cycle (two underlines, minus signs, or bars).

5.4.3.1 Permanent dress and gentle/delicate cycle instructions may be reported in symbols or words on a label with the

symbolic instructions for machine wash and the water temperature.

5.4.4 The numerical or the dot system or both illustrated in Fig. 1 may be used to represent the maximum water temperature for machine and hand washing.

5.4.4.1 The six washing temperatures are 30°C (80°F), 40°C (105°F), 50°C (120°F), 60°C (140°F), 70°C (160°F), and 95°C (200°F) and shall be in Celsius when using the numerical water temperature system.

NOTE 3—The Fahrenheit temperatures, while not true conversions from Celsius to Fahrenheit, are within the range of tolerance and represent common consumer usage.

5.4.4.2 The symbols used to represent the maximum water temperature in the dot system are: six dots [95°C (200°F)], five dots [70°C (160°F)], four dots [60°C (140°F)], very hot, three dots [50°C (120°F)], hot, two dots [40°C (105°F)], warm, one dot [30°C (85°F)], cool/cold.

5.4.4.3 The water temperature placed in the hand washing symbol may be 40°C (105°F) or 30°C (85°F).

NOTE 4—In the Canadian care symbol system, a hand in a yellow washtub means *wash gently by hand in cool water (not exceeding 30°C (85°F))*. In the ISO system, a hand in a washtub means hand wash only, do not machine wash, maximum temperature 40°C (105°F), handle with care. A water temperature is not reported in either system.

5.4.5 To represent the care instruction for a specific wash condition, use the appropriate symbol as illustrated in Fig. 1.

NOTE 5—Consumers may obtain washing machine temperatures that are frequently below the suggested temperature. The actual water temperature obtained when using the washing machine settings of hot, warm, and cold vary in North American by region, season, water heater settings, and regulations governing factory-set mixes. In general, North American washing machines do not have internal heaters.

NOTE 6—For consumer information the 30°C wash water is represented on the symbol charts by the temperature range of 65°F–85°F because detergents are not effective at lower temperatures.

5.5 The Bleaching Process—The Triangle Symbol:

5.5.1 The triangle represents the bleaching process.

5.5.2 The triangle and an additional symbol inside the triangle represent the type(s) of bleach to use.

5.5.3 A solid triangle on which the prohibitive “X” is superimposed represents the *do not bleach* warning.

NOTE 7—The Guide D 5489 bleach symbols represent the three bleaching instructions listed in the Federal Trade Commission (FTC) Glossary of Terms. The FTC Care Labeling Trade Regulation Rule states, “If regular use of chlorine bleach would harm the product, but regular use of a non-chlorine bleach would not, the label must say “Only non-chlorine bleach, when needed.”

NOTE 8—The bleach symbol in the Canadian symbol system, a yellow triangle with the letters *Cl* inside, means *use chlorine-based bleach with care*. The bleach warning symbol in the Canadian system, a red triangle enclosing the letters, *Cl* on which a red “X” is superimposed, means *do not use chlorine-based bleach*.

5.5.4 To represent the care instruction for a specific bleaching condition, use the appropriate symbol as illustrated in Fig. 1.

5.6 The Drying Process—The Square Symbol:

5.6.1 The square represents the drying process.

5.6.2 Additional symbols inside the square represent the type of drying process to use, including tumble dry, line dry,

drip dry, dry flat, and dry in shade.

5.6.3 Additional symbols below the tumble dry symbol indicate the permanent press cycle (one underline, one minus sign, or bar) and the delicate-gentle cycle (two underlines, minus signs, bars).

5.6.3.1 Permanent press and gentle/delicate cycle instructions may be reported in words along with symbolic instructions for tumble drying and the dryer heat setting.

5.6.4 The dot(s) used to represent the dryer temperatures are: three dots (high), two dots (medium), one dot (low), no dots (any heat), and, a solid or filled-in circle (no heat/air).

5.6.5 To represent the care instruction for a specific drying condition, use the appropriate symbol as illustrated in Fig. 1.

5.7 The Ironing Process—The Hand Iron Symbol:

5.7.1 The hand iron represents both the hand ironing process and the pressing process on commercial equipment in laundering and cleaning plants.

5.7.1.1 The iron represents steam and dry ironing.

5.7.1.2 An iron with a closed handle may be used to represent ironing instructions.

NOTE 9—The iron with the closed handle is used in the Canadian care symbol system.

5.7.2 Additional ironing symbols include dot symbols inside the iron to represent the temperature setting and the steam burst under the iron.

5.7.2.1 The three maximum temperatures for the iron heat settings are 200°C (390°F) for high (3 dots), 150°C (300°F) for medium (2 dots), and 110°C (230°F) for low (1 dot).

5.7.2.2 The warning symbol, crossed-out steam lines under the iron, or words, may be used to report the warning *do not steam*.

5.7.3 To represent the care instruction for a specific ironing condition, use the appropriate symbol as illustrated in Fig. 1.

5.8 The Drycleaning Process—The Circle Symbol:

5.8.1 The circle represents the professional textile care processes of drycleaning and professional wetcleaning. The circle symbol must be used with the letters “P”, “F”, or “W” within the circle to indicate the proper method of care. The circle symbol must not appear without an appropriate letter code.

5.8.2 The letter “F” enclosed in the circle symbol represents drycleaning in hydrocarbon solvent (distillation temperature between 150°C and 210°C, flash point 38°C to 70°C) using a 20–25 minute cycle length, 1½% moisture, and 60°C to 65°C (140°F to 150°F) drying temperature. Drycleaning in tetrachloroethylene (perchloroethylene) solvent is not allowed.

NOTE 10—The “A” (formerly representing the instruction, dryclean in any solvent) shall no longer be used in the circle symbol that now represents professional textile care. Tetrachloroethylene solvent is also called perchloroethylene and tetrachloroethene solvent. Petroleum solvent is a type of hydrocarbon solvent.

5.8.3 Additional symbols with the drycleaning symbol give additional information concerning the drycleaning process.

5.8.3.1 The iron symbol may be used with the drycleaning symbol to report how to restore the item by ironing after wearing.

5.8.4 Professional wetcleaning is an optional instruction. The absence of a wetcleaning symbol means that the item has

not been tested for the wetcleaning process. Machine washing symbols may be used to determine the professional wetcleaning process. Items labeled as machine washable are also professionally wetcleanable. A professional wetclean instruction is informative when the item is labeled “do not wash” or “hand wash.”

5.9 Required Number and Order of Symbols:

5.9.1 To represent the laundering process on a care label, a minimum of four care instruction symbols in the following order—washing, bleaching, drying, and ironing—shall be used (see Fig. 2).

5.9.1.1 The required symbol may be a prohibitive symbol (“X”), if necessary.

5.9.1.2 Additional warnings and information in symbols or words, as appropriate, shall be placed after or below the four laundering symbols or in the logical refurbishing sequence of the written instructions.

5.9.2 To represent the drycleaning process on a care label, the drycleaning symbol, as a minimum, shall be used. (See Fig. 2.)

5.9.2.1 As appropriate, additional warnings and information shall be placed around, after, or below the drycleaning symbol or in the logical refurbishing sequence of the written instructions.

NOTE 11—The ISO care symbol system requires four care symbols in the following order: washing, bleaching, ironing, and drycleaning. Tumble drying is an optional symbol, which, if used, appears after the four symbols.

5.10 Supplementary Care Information:

5.10.1 Additional written care information in English (or the appropriate national language) may be necessary to convey special instructions not covered by the appropriate care symbol or may be legislated by the country of origin. See Fig. 1 and Table 1.

5.10.1.1 For example, the words “remove promptly” shall be added to an article for which this instruction would be appropriate.

5.10.2 The additional words shall appear on the care label in the logical refurbishing sequence.

5.10.3 The written information on a care symbol label shall be brief.

5.10.4 The symbol information and any accompanying detailed written instructions shall be consistent.

5.11 Appropriate Instructions and Labels:

5.11.1 It is the responsibility of the manufacturer, or importer to provide the correct information on the care label for refurbishment.

5.11.2 Determining and confirming care instructions requires setting performance specifications, testing, and evaluating the textile product.

5.11.2.1 To aid in determining and confirming appropriate instructions, see Guide D 3938 and published test methods and performance specifications are available in the current *Annual Book of ASTM Standards*, Vols 07.01 and 07.02, and the current Technical Manual of the American Association of Textile Chemists and Colorists (see 2.1 and 2.2).

5.11.3 In the United States, care labels must be attached permanently to domestic and imported apparel except when

TABLE 1 Additional Words to Use with Care Symbols

NOTE 1—This guide uses symbols to represent many textile refurbishing procedures. Additional words may be needed to clarify specific care procedures. This table of additional words to use with care symbols includes the remaining terms listed in the Federal Trade Commission Care Labeling Glossary of Standard Terms and additional terms in common usage. These terms are illustrative only and are not meant to be an exhaustive list of all terms that might be appropriate or necessary. In general, whatever additional words are needed to state a care procedure that will result in the adequate refurbishment of the item should be used.

Federal Trade Commission Standard Terms	Terms in Common Usage
<i>Preliminary and Laundering Instructions</i>	
do not have commercially laundered	close zippers
small load	do not pretreat
separately	do not soak
with like colors	remove buttons
wash inside out	remove lining
	remove shoulder pads
	remove trim
	wash dark colors separately
	wash once before wearing
warm rinse	wash separately
cold rinse	wash with like colors
rinse thoroughly	do not use fabric softener
no spin or do not spin	remove promptly
no wring or do not wring ^A	rinse twice
no wring or twist ^A	use oversize washing machine
damp wipe only	
<i>Bleaching (all terms represented by symbols)</i>	
<i>Drying, All Methods</i>	
no heat ^A	tumble dry, air ^A
remove promptly	do not tumble dry
line dry in the shade ^A	reshape and dry flat
line dry away from heat	block flat to dry
block to dry	
smooth by hand	
<i>Ironing and Pressing</i>	
iron wrong side only	do not iron decal
no steam or do not steam ^A	iron reverse side only
steam only	iron right side only
iron damp	warm iron if needed
use press only	use press cloth
<i>Wash or Dryclean (can be represented with symbols)</i>	
<i>Drycleaning, All Methods</i>	
professionally dryclean	fur clean
short cycle ^A	use clear solvent
minimum extraction	clear distilled solvent rinse
reduced or low moisture ^A	
tumble warm	low heat ^A
tumble cool	
cabinet dry warm	
cabinet dry cool	
no steam or do not steam	no steam finishing
steam only	
use fluorocarbon solvent	
<i>Additional Instructions</i>	
Send to a professional leather cleaner. Do not wash or dryclean by fabric methods.	
Fur clean.	

^ACare instruction may be reported in words or a symbol.

exempted by the U.S. Federal Trade Commission Regulation (see 2.3).

5.11.4 Permanent care labels shall remain attached and legible for the life of the textile product.

5.11.5 Either the care label or the detailed care instructions shall be visible at the point of purchase.

6. Keywords

6.1 bleaching; care instructions; care label; care symbol; consumer textile product; drycleaning; drying; ironing; permanent care label; pressing; washing

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