



Designation: D5445 – 21

Standard Practice for Pictorial Markings for Handling of Goods¹

This standard is issued under the fixed designation D5445; 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.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This practice establishes a set of symbols to be used for marking of packages or containers to indicate special handling and storage requirements.

1.2 The values stated in SI units are to be regarded as standard. The values given in parentheses after SI units are provided for information only and are not considered standard.

1.3 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

D996 Terminology of Packaging and Distribution Environments

2.2 *ISO Standards:*

ISO 780 Pictorial Marking for Handling of Goods³

ISO 7000 Registration of Markings and Symbols³

3. Terminology

3.1 *Definitions*—General definitions for packaging and distribution are found in Terminology D996.

¹ This practice is under the jurisdiction of ASTM Committee D10 on Packaging and is the direct responsibility of Subcommittee D10.11 on Terminology (definitions).

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute, 25 W. 43rd St., New York, NY 10017.

4. Significance and Use

4.1 Packages are often marked with handling instructions in the language of the country of origin. While this may safeguard the consignment to some extent, it is of little value for goods consigned to, or through, countries using different languages, and of no value at all if people unloading the packages are illiterate. Pictorial symbols offer the most likely means of conveying the consignor's intention and their adoption will, therefore, undoubtedly reduce loss and damage through incorrect handling. The use of pictorial symbols does not provide any guarantee of satisfactory handling; proper protective packaging is therefore of primary importance.

5. Symbols

5.1 *Display of Symbols*—Symbols may appear on a label or should preferably be printed directly on the package. It is recommended that printed symbols be painted, stenciled (see Note 1), preprinted or otherwise reproduced, as specified herein. Affirmative symbols need not be framed by border lines, but all negative symbols, that is, “DO NOT ...,” shall have borders with a slash mark across.

NOTE 1—For stencilling, the symbols may be provided with bars if required (see Appendix X1).

5.2 *Color of Symbols*—The preferred color for symbols is black. If the color of the package is such that the symbol would not show clearly, provide a panel of a suitable contrasting color, preferably white, as a background. Take care to avoid the use of colors that could lead to confusion with the labeling of dangerous goods. The color red may be used when increased emphasis is required to focus attention of package handlers.

5.3 *Size of Symbols*—The suggested sizes of symbols shall be 100, 150, or 200 mm (4, 6, or 8 in.). The size or shape of the package may, however, necessitate use of larger or smaller sizes for the symbols, scaled proportionately.

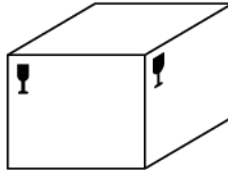
5.4 *Number, Location, and Position of Symbols:*

5.4.1 Use only those pictorial markings required for the package.

5.4.2 The number of identical symbols to be affixed to any package depends on its size and shape (see remarks column for each symbol).



Examples of display:



FUNCTION: To indicate (a) that the contents of the package are fragile;
(b) that it has to be handled with care.
REMARKS: Place on at least two adjacent sides in upper corner.
When used with Symbol 2, that symbol shall be closest to corner (see 2b).
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SYMBOL 1 “Fragile Handle With Care”

5.4.3 When packages are formed into a unit load, locate symbols so as to ensure they are visible (see Symbol 2).

5.4.4 Give particular attention to the correct application of the marks. Faulty application may lead to misinterpretation. Apply Symbols 4, 6, 7, and 32 in their correct respective positions to convey their meanings clearly and fully.

6. Handling Instructions

6.1 Indicate handling instructions on packages by using the corresponding symbols given in the remarks column of each symbol. Symbol 1 contains two messages.

6.2 If necessary the cautionary basic text may appear below the symbol in English or in the national language of the country of destination, or both. However, to the extent possible, instructions should be written in languages commonly used in international trade.

7. Keywords

7.1 handling; packaging; pictorial markings; symbols