



Designation: D 3892 – 93 (Reapproved 1998)

Standard Practice for Packaging/Packing of Plastics¹

This standard is issued under the fixed designation D 3892; 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 Department of Defense.

1. Scope

1.1 This practice covers the packaging and packing of all thermoset and thermoplastic resins and fabricated shapes.

1.2 *This standard does not purport to address all of the safety problems, 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.*

NOTE 1—There is no similar or equivalent ISO standard.

2. Referenced Documents

2.1 ASTM Standards:

D 883 Terminology Relating to Plastics²

2.2 Federal Standards:

Department of Transportation 19A, Title 49, Code of Federal Regulations, Section 178.190, Wooden Boxes—Glued, Plywood Cleated³

Department of Transportation 17H, Title 49, Code of Federal Regulations, Section 178.118, Steel Drums³

2.3 Other Standards:

National Motor Freight Classification⁴

Uniform Freight Classification Rules⁵

3. Terminology

3.1 *Definitions:* For definitions of technical terms used in this practice pertaining to plastics, see Terminology D 883.

4. Significance and Use

4.1 Packing and packaging provisions are outlined as needed for adequate transport of resins and finished products with a minimum of mishaps in shipment.

4.2 Commercial levels are included for all commercial and most federal and military shipments. Level A requirements are added for special military purchases only.

5. Procedure

5.1 *Examination of Preparation for Delivery*—Examine in accordance with Table 1 to determine that packaging, packing, and marking comply with requirements specified in the contract or order. The sample unit for this examination shall be one shipping container fully prepared for delivery.

5.2 *Packaging*—Packaging shall be commercial or Level A, as specified.

5.2.1 *Commercial*—The material shall be packaged in accordance with normal commercial practice. The complete package shall be designed to ensure the item against damage during shipment, handling, and storage.

5.2.2 *Level A—For Military Procurement Only:*

5.2.2.1 *Sheets, Rods, Tubes, Pipes, Fittings, and Other Shapes*—Unless otherwise specified in the contract or order, individual fabricated shapes shall be packaged in such a manner as to protect the material against physical and mechanical damage and contamination during transit. Only items comprised of a single National Stock number (NSN) or identifying number shall be placed in one package. Individual sheets shall be masked or interleaved.

5.2.2.2 *Rolls of Film or Sheeting*—These shall be supplied in rolls. Each roll shall be wrapped with at least one layer of polyethylene film or kraft paper, and tightly sealed with tape to prevent contamination.

5.3 *Packing*—Packing shall be commercial or Level A, as specified.

5.3.1 *Commercial*—The material shall be packed in accordance with normal commercial practice. The packaged material shall be packed to assure acceptance by common carrier and to provide product protection against loss and damage during multiple shipments, handling, and storage. The shipping container shall be in compliance with National Motor Freight Classification and Uniform Freight Classification Rules.

5.3.2 *Level A (For Military Procurement Only):*

5.3.2.1 *Sheets, Rods, Tubes, Film, and Other Shapes*—The materials packaged as specified in 5.2.2.1 and 5.2.2.2 shall be packed in plywood cleated boxes conforming to Department of

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² *Annual Book of ASTM Standards*, Vol 08.01.

³ Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

⁴ Available from American Trucking Assn., 1616 P Street, N.W., Washington, DC 20036.

⁵ Available from Railroad Freight Classification, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.

TABLE 1 Examination for Defects in Preparation for Delivery

| Examine | Defect |
|-----------------|---|
| Packaging | Not level specified. Packaging material not as specified. |
| Packing | Not level specified. Containers not as specified. |
| Count | Less than specified or indicated quantity. |
| Weight and cube | Gross weight is greater than, or less than, specified requirements. |
| Markings | Markings not in accordance with specified requirements. |

Transportation (DOT) 19A. All items packed together must be of the same technical description.

5.3.2.2 *Resin, Powder, Granules*—Unless otherwise specified, the material in the quantity specified shall be packed in metal drums conforming to DOT 17H. Insofar as practical, containers shall be of uniform shape and size, with minimum cube and tare consistent with the protection required. All items packed together must be of the same technical description.

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This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

5.4 *Marking*—Marking for interior packages and shipping containers shall be as specified in the contract or order.

6. Ordering Information

6.1 All orders shall include the following information:

6.1.1 Title, number, and date of this practice: ASTM D 3892,

6.1.2 Type of material required,

6.1.3 Color required, with tolerance and method of determination, including whether determination shall be made on unprocessed material or molded specimens,

6.1.4 Form and uniformity required, when so specified,

6.1.5 Level of packaging/packing required, and

6.1.6 Marking requirements.

7. Keywords

7.1 containers; film; marking; packaging; packing; plastics; shapes; sheeting