

A-A-3129 – Cushioning Material, Flexible Open Cell Plastic Film (for Packaging Applications)

Subject/Scope:

This specification covers flexible, open cell, heat sealable, noncorrosive, plastic film for use in cushioning and wrapping applications. The material covered by this specification shall be of the following Types, Classes, Styles and Grades, as specified below and 7.4.

Keywords:

Material, grade, thickness, film, safety, type, style, nominal, federal, commercial, cushioning, sheet, ASTM, class, packaging, MSDS, reinforcing, cell, fire, retardant, specification, flexible, wrapping, roll, health, transparent, plastic, static, dissipative, test, electrostatic, decay, surface, requirement, government, chlorofluorocarbon

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Text in blue boxes such as this one is instructional and is intended to assist you in understanding the document.

Text in red boxes such as this explains changes made to the document by The Wooden Crates Organization.

Red text has been added to the document or modifies the document since its final version was officially published.

Soft Conversion of Imperial to Metric

Conversions, when made, consider materials that are available in metric or imperial sizes rather than converting sizes exactly. For example: Panelboard (plywood) in the US is typically 4 feet X 8 feet (1220 x 2440 mm) while panelboard in metric countries is typically 1200 X 2400 mm. Since the standard was developed based on readily available materials these variations in material sizes could not have been practically considered.



The content of the document below has not been modified.

[METRIC]

A-A-3129

October 6, 1997

COMMERCIAL ITEM DESCRIPTION

CUSHIONING MATERIAL, FLEXIBLE OPEN CELL PLASTIC FILM (FOR PACKAGING APPLICATIONS)

The General Services Administration has authorized the use of this commercial item description in lieu of Federal specification PPP-C-1842, which is canceled.

1. SCOPE. This specification covers flexible, open cell, heat sealable, noncorrosive, plastic film for use in cushioning and wrapping applications. The material covered by this specification shall be of the following Types, Classes, Styles and Grades, as specified below and 7.4.

Type I - Cushioning applications, nominal thickness not less than 6.4 mm (1/4")

Type II - Wrapping applications, nominal thickness less than 6.4 mm (1/4")

Style A - Perforated

Style B - Nonperforated

Class 1 - Without reinforcing top film

Class 2 - With reinforcing top film

Grade A - Regular

Grade B - Static dissipative

Grade C - Fire retardant

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data which may improve this document, should be sent to: General Services Administration, Federal Supply Service, 26 Federal Plaza, New York N.Y. 10278
ATTN: Engineering Branch (2FYEE).

FSC 8135

3. SALIENT CHARACTERISTICS.

3.1. Construction. The material shall be constructed of a flexible polyethylene or similar plastic film with uniformly distributed open cells structured to provide cushioning without relying on encapsulated air. The Class 2 material shall have an additional attached top film that allows impacts to be spread over a number of cells. The film shall be attached in the way that allows for cell to cell transfer of any air not escaping through openings on the cell side of the material, thus allowing for a dampening effect. The material shall be sufficiently transparent to permit reading of 10-point type through a single layer of material when held directly behind and touching the material. The material shall be heat sealable, corrosion resistant and flexible at low temperatures in accordance with normal commercial practice.

3.1.1. Chlorofluorocarbon and Halon. The manufacturing processes for the material shall be chlorofluorocarbon (CFC) and halon free. Material Safety Data Sheets (MSDS) indicating conformance shall be provided. (See 3.1.3).

3.1.2. Use of Carcinogenic Agents. The use of carcinogenic agents in the manufacture/fabrication of fire retardant packaging materials in a concentration of greater than 0.1% is prohibited (see 7.3). Material Safety Data Sheets (MSDS) indicating conformance shall be provided. (See 3.1.3).

3.1.3. Material Safety Data Sheets. The contracting activity shall be provided a Material Safety Data Sheet (MSDS) prior to contract award. The MSDS shall be prepared and submitted in accordance with FED-STD-313 and 29 CFR 1910.1200. In the event of a conflict, 29 CFR 1910.1200 shall take precedence. The MSDS shall be included with each shipment covered by this document. (see 7.2)

3.2. Form. The material shall be furnished in continuous length rolls or sheets, in nominal thickness, as specified. When Style A is specified, the rolls or sheets shall be perforated at specified distances.

3.3. Dimensions. Rolls and perforated rolls shall be not less than the specified length. The width shall be as specified, with a tolerance of 6.4 mm ($\pm 1/4$ "). When Style A is specified, the perforations shall be not more than 6.4 mm ($1/4$ ") apart and of a size such that the material can be easily separated at the perforations. The tolerance for the distance between the rows of perforations in Style A material shall be 6.4 mm ($\pm 1/4$ ").

3.3.1. Thickness. The thickness of the material shall be as specified, with the tolerance of 1.3 mm (± 0.05 "), when tested in accordance with ASTM D 2221. The material used for cushioning applications, Type I, shall have a nominal thickness of not less than 6.4 mm (1/4") thick. The material used for wrapping applications, Type II, shall have a nominal thickness less than 6.4 mm (1/4")

3.4. Workmanship. The material shall be free from cracks, cuts, holes, chafed spots, or other imperfections which may impair its appearance and serviceability. It shall be free from dirt, mold release compounds, contamination, or other foreign matter.

3.5. Shelf Life. The manufacturer is required to provide test data and to certify that after 36 months of storage under normal warehouse conditions (temperature 45°F to 120°F and 20% to 90% RH), the Grade B material having the same nomenclature and manufactured under comparable conditions will be able to pass the electrostatic decay time and the surface resistivity tests of paragraphs 3.6.8 and 3.6.9 respectively.

3.6. Physical Properties. The material shall pass the applicable requirements specified below.

3.6.1. Creep (Type I). The creep shall be not more than 10 % when tested after 7 days, in accordance with ASTM D 2221, using a load of 0.25 ± 0.005 psi.

3.6.8. Electrostatic Decay Time (Grade B). The electrostatic decay time shall be not more than 2.0 seconds when tested in accordance with Fed.Std.No.101, method 4046 (12 days oven and 24 hrs water shower test not required).

3.6.9. Surface Resistivity (Grade B). The surface resistivity, expressed to 3 significant figures, shall be not less than 1.00×10^5 ohms per square and not more than 1.00×10^{12} ohms per square when tested in accordance with ASTM D 257.

3.6.10. Flame Spread (Grade C). A flame spread index shall be not more than 10 when tested in accordance with ASTM E 162.

3.6.11. Smoke Density (Grade C). A specific optic density shall be not more than 45 when tested in accordance with ASTM E 662.

4. QUALITY ASSURANCE PROVISIONS

4.1 Product conformance. The product provided shall meet the salient characteristics of this Commercial Item Description, conform to producer's own drawings, specifications, standards, and quality assurance practices and be the same product offered for sale in the commercial market. The government reserves the right to require proof of such conformance.

5. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

6. REFERENCED DOCUMENTS: The issues of the referenced documents in effect on the date of the solicitation for offers or request for proposals shall be used to determine conformance with the requirements of this Commercial Item Description.

6.1. Federal Regulations: Federal Acquisition Regulation. Paragraph 23.403. Copies of the U.S. Code may be obtained through the Congressional Sales Office, U.S. Government Printing Office, Washington, D.C. 20402.

6.2. Federal Standards, Specifications and Commercial Item Descriptions, may be obtained from the General Services Administration, Federal Supply Service Bureau, Specifications Section, Suite 8100, 470 East L'Enfant Plaza, SW Washington D.C.20407. Ph:(202)619-8925, Fax: (202)619-8978, FTS-458-9205.

6.3. American Society for Testing and Materials (ASTM) test methods, may be obtained from: ASTM 100 Barr Harbor Dr. West Conshohocken, PA 19428. Ph:(610)832-9500 Fax:(610)832-9555.

7. NOTES

7.1. Intended use. The materials described, are intended for use within packages. Transparent materials are especially suitable for use in inserts within transparent bags and envelopes to permit inspection of the contents. The materials are also used as bags, wraps, dunnage and as filler. Maximum transparency is obtained when use is limited to one thickness.

7.2. Material Safety Data Sheets. Contracting officers will identify those activities requiring copies of completed MSDS prepared in accordance with FED-STD-313 and 29 CFR 1910.1200. The pertinent Government mailing addresses for submission of data sheets are listed in FED-STD-313.

7.3. Carcinogen. A carcinogen is defined as chemical appearing on one or more of the following source documents: Occupational Safety and Health Administration regulated carcinogens list, National Toxicology Program list, International Agency for Research on Cancer lists 1, 2A or 2B.

7.3.1. Precautions in Handling. Certain individuals may experience adverse reactions of a respiratory, dermatological, or other nature or be sensitive to ingredients used in the manufacture/fabrication of some fire retardant packaging materials. Problems or adverse effects resulting or suspected from handling these materials should be referred to the local Medical Department for appropriate follow-up. Safety concerns should be referred to the local Safety Office for review. Questions regarding specific packaging material may be referred to the Navy Environmental Health Center, Code 34B, Norfolk, VA. The following precautions during handling are recommended:

7.3.1.1. Cotton gloves should be worn. Gloves should be changed at the end of the workshift, and laundered before reuse or discarded. Gloves should be changed more frequently if they fail to provide protection against skin contamination during the workday.

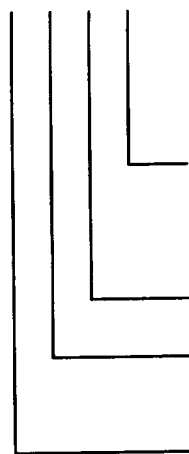
7.3.1.2. Good general ventilation should be provided to ensure that significant airborne levels of dust from fire retardant packaging materials do not accumulate in work areas. Questions should be referred to the local Industrial Hygienist for review. If dust generation is unavoidable, a National Institute for Occupational Safety and Health/Mine Safety and Health Administration approved respirator, selected based on the exposure of concern, must be provided and used. Contact the local Industrial Hygienist for specific guidance pertaining to request for training and use of approved respirators.

7.4. Ordering data. Purchasers should select the preferred options permitted herein, and include the following information in procurement documents:

- a) Title, number, and date of this specification.
- b) Type, style, class, grade & form required.
- c) Length & width required.
- d) For Style A, distance between rows of perforations.
- e) Packaging, packing & marking required.

7.3.1. Item Identifiers/Reference Part Number System
(for cataloging use only)

AA3129 - 1 A 2 B This example describes a perforated,
static dissipative, cushioning material
with reinforcing top film and the nominal
thickness of not less than 6.4mm (1/4")



Grade A - Regular
Grade B - Static dissipative
Grade C - Fire retardant

Class 1 - Without reinforcing top film
Class 2 - With reinforcing top film

Style A - Perforated
Style B - Nonperforated

Type I - Cushioning applications, nominal
thickness not less than 6.4mm (1/4").
Type II - Wrapping applications, nominal
thickness is less than 6.4mm (1/4").

MILITARY INTEREST

PREPARING ACTIVITY

Military Coordinating Activity

GSA-FSS

Army - GL

Custodians:

Air Force - 69
Army - GL
Navy - SA

Review Activities:

Air Force - 99
Army - SM
Navy - AS

User activities:

Army - AV, EL, ME, WC