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MIL-R-21252B(SH)
 8 September 1987
 SUPERSEDING
 MIL-R-21252A(SHIPS)
 8 February 1965
 (See 6.3)

MILITARY SPECIFICATION

RUBBER SHEET, SOLID, SYNTHETIC, SHIPBOARD
 WATER EVAPORATOR GASKETING

This specification is approved for use within the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers gasket material for use in shipboard water stills.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

FEDERAL

- PPP-B-576 - Boxes, Wood, Cleated, Veneer, Paper Overlaid.
- PPP-B-585 - Boxes, Wood, Wirebound.
- PPP-B-591 - Boxes, Shipping, Fiberboard, Wood-Cleated.
- PPP-B-601 - Boxes, Wood, Cleated-Plywood.
- PPP-B-621 - Boxes, Wood, Nailed and Lock-Corner.
- PPP-B-636 - Boxes, Shipping, Fiberboard.
- PPP-T-76 - Tape, Packaging, Paper (For Carton Sealing).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Commander, Naval Sea Systems Command, SEA 55Z3, Department of the Navy, Washington, DC 20362-5101 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC N/A

FSC 5330

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THIS DOCUMENT CONTAINS 12 PAGES.

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MILITARY

- MIL-P-116 - Preservation, Methods of.
- MIL-L-10547 - Liners, Case, and Sheet, Overwrap; Water-Vaporproof or Waterproof, Flexible.
- MIL-I-17433 - Inhibitor, Hydrochloric Acid Descaling and Pickling Solutions.

STANDARDS

FEDERAL

- FED-STD-601 - Rubber: Sampling and Testing.

MILITARY

- MIL-STD-129 - Marking for Shipment and Storage.
- MIL-STD-289 - Visual Inspection Guide for Rubber Sheet Material.

(Copies of specifications and standards required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

2.2 Other publications. The following document forms a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted shall be those listed in the issue of the DoDISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS shall be the issue of the nongovernment documents which is current on the date of the solicitation.

UNIFORM CLASSIFICATION COMMITTEE AGENT

Uniform Freight Classification Ratings, Rules and Regulations

(Application for copies should be addressed to the Uniform Classification Committee Agent, Tariff Publication Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

(Nongovernment standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Form. The synthetic rubber shall be furnished in the form of sheets with dimensions and tolerances as specified (see 6.1).

3.2 Physical requirements. The synthetic rubber material shall conform to the requirements specified in table I.

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TABLE I. Physical requirements of rubber.

Properties	Requirement	Test method
Initial properties:		
Tensile strength, lb/in ² , minimum	1600	4.7.1
Ultimate elongation, percent, minimum	70	4.7.1
Hardness, shore A durometer, 3 second	85 ± 5	4.7.2
Properties after oven aging:		4.7.3
Tensile strength, lb/in ² , minimum	1600	4.7.3.1
Ultimate elongation, percent, minimum	40	4.7.3.1
Hardness, shore A durometer, maximum	95	4.7.3.2
Compression set, percent, maximum	65	4.7.3.3
Properties after immersion in distilled water:		4.7.4
Tensile strength, lb/in ² , minimum	1200	4.7.4.1
Ultimate elongation, percent, minimum	60	4.7.4.1
Volume change, percent	0 to 25	4.7.4.2
Extraction, percent, maximum	0.5	4.7.4.3
Properties after immersion in descaling solution:		4.7.5
(a) After immersion in hydrochloric acid solution.		
(b) After immersion in sodium bisulfate solution.		
(c) After immersion in sulfamic acid solution.		
Tensile strength, lb/in ² , minimum	1200	4.7.5.1
Ultimate elongation, percent, minimum	60	4.7.5.1
Volume change, percent	0 to 25	4.7.5.2
Sealing ability:		4.7.6
Initial	no leaks	4.7.6
After oven aging	no leaks	4.7.6
Crushing resistance	no damage	4.7.6

3.3 Material.

3.3.1 Recovered materials. Unless otherwise specified herein, all material incorporated in the products covered by this specification shall be new and may be fabricated using materials produced from recovered materials to the maximum extent practicable without jeopardizing the intended use. The term "recovered materials" means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. None of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this specification unless otherwise specifically specified.

3.4 Workmanship. The workmanship shall be such as to meet all applicable requirements of this specification.