

INCH-POUND

MIL-G-1149C

9 November 1988

SUPERSEDING

MIL-G-1149B

10 November 1966

(See 6.7)

MILITARY SPECIFICATION

GASKET MATERIALS, SYNTHETIC RUBBER, 50 AND 65 DUROMETER HARDNESS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers vulcanized synthetic rubber gasket materials of nominal 50 and 65 durometer hardness.

1.2 Classification. Gasket materials shall be furnished in the following types and classes, as specified (see 6.2):

Type I - Nominal 50 durometer hardness

Class 1 - Oil resistant (chloroprene polymer)

Class 2 - Non-oil resistant (styrene-butadiene copolymer)

Class 3 - Phosphate ester resistant (isoprene-isobutylene
copolymer)

Class 5 - Fuel resistant (acrylonitrile-butadiene copolymer)

Type II - Nominal 65 durometer hardness

Class 1 - Oil resistant (chloroprene polymer)

Class 2 - Non-oil resistant (styrene-butadiene copolymer)

Class 3 - Phosphate ester resistant (isoprene-isobutylene
copolymer)

Class 5 - Fuel resistant (acrylonitrile-butadiene copolymer)

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 5523, 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

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

- A-A-1894 - Paper, Kraft, Treated (Fire Resistant).
- UU-P-268 - Paper, Kraft, Wrapping.
- PPP-F-320 - Fiberboard; Corrugated and Solid, Sheet Stock (Container Grade), and Cut Shapes.

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- MIL-L-19140 - Lumber and Plywood, Fire-Retardant Treated

STANDARDS

FEDERAL

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

MILITARY

- MIL-STD-190 - Identification Marking of Rubber Products.
- MIL-STD-289 - Visual Inspection Guide for Rubber Sheet Material.
- MIL-STD-298 - Visual Inspection Guide for Rubber Extruded Goods.
- MIL-STD-407 - Visual Inspection Guide for Rubber Molded Items.
- MIL-STD-1186 - Cushioning, Anchoring, Bracing, Blocking and Waterproofing with Appropriate Test Methods
- MIL-STD-2073-1 - DoD Materiel Procedures for Development and Application of Packaging Requirements

(Unless otherwise indicated, copies of federal and Military specifications and standards are available from the Naval Publications and Forms Center (ATTN. NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

2.2 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- D 395 - Standard Test Methods for Rubber Property - Compression Set. (DoD adopted)
- D 412 - Standard Test Methods for Rubber Properties in Tension. (DoD adopted)

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ASTM (Continued)

- D 573 - Standard Test Method for Rubber - Deterioration in an Air Oven. (DoD adopted)
- D 792 - Standard Test Methods for Specific Gravity (Relative Density) and Density of Plastics by Displacement. (DoD adopted)
- D 2240 - Standard Test Method for Rubber Property - Durometer Hardness. (DoD adopted)
- D 3951 - Standard Practice for Commercial Packaging. (DoD adopted)
- F 104 - Standard Classification System for Non-Metallic Gasket Materials. (DoD adopted)
- F 147 - Standard Test Method for Flexibility of Non-Metallic Gasket Materials. (DoD adopted)

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Non-Government standards and other publications are normally available from the organizations that prepare or 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 document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection (see 6.4) in accordance with 4.3.

3.2 Materials. The material shall be vulcanized rubber which meets the requirements specified herein. Asbestos and components containing asbestos are prohibited (see 6.3).

3.2.1 Recovered materials. Unless otherwise specified herein, all equipment, material, and articles 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 specified.

3.2.2 Age. The age of the vulcanized rubber shall not exceed 12 months from the month in which it was cured to the date of acceptance by the purchaser under the contract or order (see 4.4.2.2).

3.3 Form. The gasket material shall be furnished in the form specified (see 6.2). The forms are sheets, strips with rectangular cross section, shapes cut from sheets, molded shapes, and extruded shapes.

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3.3.1 Sheets. Sheet rubber shall be supplied in rolls that are 36 ± 1 inch wide. Length and thickness shall be as specified (see 6.2). Tolerances in thickness shall be as specified in table I.

TABLE I. Tolerances in width and thickness.

Width (inches)	Tolerance (\pm inch)	Thickness (inches)	Tolerance (\pm inch)
Less than 1/16	1/100	Less than 1/16	1/128
1/16 to 1/8, inclusive	1/64	Over 1/16 to 1/8, inclusive	1/64
Over 1/8 to 1/2, inclusive	1/32	Over 1/8 to 1/2, inclusive	1/32
Over 1/2 to 1, inclusive	3/64	Over 1/2 to 1, inclusive	3/64
Over 1 to 2, inclusive	1/16	Over 1	1/16
Over 2	3 percent of width		

3.3.2 Strips. The strip rubber cross section dimensions shall be as specified (see 6.2). Unless otherwise specified, tolerances in width and thickness shall conform to table I.

3.3.3 Cut, molded, and extruded shapes. Cut, molded, and extruded shapes shall have the form, dimensions, and tolerances specified (see 6.2).

3.4 Physical requirements. The gasket material shall meet the requirements in table II.

TABLE II. Physical requirements.

	Type I	Type II	Test procedure
Initial properties:			
Tensile strength, lb/in ² (minimum)	1000	1000	4.6.2
Ultimate elongation, percent (minimum)	300	250	4.6.2
Hardness, durometer units	50 ± 5	65 ± 5	4.6.3

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TABLE II. Physical requirements. - Continued

	Type I	Type II	Test procedure
Specific gravity, class 1 (maximum)	1.65	1.75	4.6.4
Specific gravity, classes 2, 3, and 5 (maximum)	1.55	1.65	4.6.4
Properties after oven aging:			
Tensile strength, percent of initial (minimum)	80	80	4.6.6
Ultimate elongation, percent of initial (minimum)	65	65	4.6.6
Hardness, Shore A durometer (maximum)	60	75	4.6.7
Hot compression set, percent (maximum)	75	75	4.6.8
Flexibility at low temperature, load in grams (maximum) required to deflect:			
1 inch	50	50	4.6.9
2 inches	70	70	4.6.9
Properties after immersion:			
Water extraction, percent (maximum)	0.5	0.5	4.6.10
Oil resistance (for class 1 only), percent	0 to +120	0 to +120	4.6.11
Phosphate ester resistance (for class 3 only), percent	0 to +35	0 to +35	4.6.12
Fuel resistance (for class 5 only), percent	0 to +60	0 to +60	4.6.13

3.5 Identification markings. Unless otherwise specified (see 6.2), the gasket material shall be marked in accordance with MIL-STD-190. In addition, the identification markings shall indicate the Military specification number, type, class, and cure date (quarter and year). Sheet material marking shall be 1/2 inch high occurring every 6 inches continuously across the sheet and recurring lengthwise every 4 inches on one side only.

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3.6 Workmanship. Workmanship shall meet all the applicable requirements of this specification. Surfaces shall be free of surface voids, tears, rips, cuts and free from all foreign matter that may affect the use of the finished product (see 4.4.2.1).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements (examinations and tests) as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in this specification where such inspections are deemed necessary to ensure supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet all requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of ensuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling inspection, as part of the manufacturing operations, is an acceptable practice to ascertain conformance to requirements; however, this does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to accept defective material

4.2 Classification of inspections. The inspection requirements specified herein are classified as follows:

- (a) First article inspection (see 4.3).
- (b) Quality conformance inspection (see 4.4).

4.2.1 Inspection conditions. Unless otherwise specified (see 6.2), all inspections shall be performed in accordance with the conditions specified herein.

4.3 First article inspection. First article inspection shall consist of the examinations and tests specified in table III which shall be conducted on samples from (or representing) the first lot of material ordered for delivery under a contract or order and from every tenth lot thereafter (see 6.3).

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TABLE III. First article inspection.

Test	Requirement	Test method
Dimensions		
Width and length	3.3	4.4.2.1
Thickness	3.3	4.4.2.1
Tensile strength and ultimate elongation	Table II	4.6.2 and 4.6.6
Hardness	Table II	4.6.3 and 4.6.7
Specific gravity	Table II	4.6.4
Hot compression set	Table II	4.6.8
Flexibility	Table II	4.6.9
Water extraction	Table II	4.6.10
Oil resistance	Table II	4.6.11
Phosphate ester resistance	Table II	4.6.12
Fuel resistance	Table II	4.6.13
Identification markings	3.5	4.4.2.1
Workmanship	3.6	4.4.2.1

4.4 Quality conformance inspection. Quality conformance inspection shall be as specified in table IV. Samples to be tested shall be subjected to the group A, B, and C tests (see 6.3).

TABLE IV Quality conformance inspection

Test	Requirement	Test method
Group A		
Width and length	3.3	4.4.2.1
Thickness	3.3	4.4.2.1
Identification markings	3.5	4.4.2.1
Workmanship	3.6	4.4.2.1
Group B		
Tensile strength and ultimate elongation	Table II	4.6.2 and 4.6.6
Hardness	Table II	4.6.3 and 4.6.7
Specific gravity	Table II	4.6.4
Flexibility	Table II	4.6.9
Group C		
Hot compression set	Table II	4.6.8
Water extraction	Table II	4.6.10
Oil resistance	Table II	4.6.11
Phosphate ester resistance	Table II	4.6.12
Fuel resistance	Table II	4.6.13

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4.4.1 Sampling.

4.4.1.1 Lot. For the purposes of sampling for examinations and tests, a lot shall consist of one type and class of material of the same form and dimensions produced in one plant under essentially the same conditions, not to exceed 2,500 pounds, and offered for delivery at one time. In each case the number of pieces shall be the lot size.

4.4.1.2 Sampling for examination of material. Samples shall be taken at random from each lot in accordance with the sampling plan given in table V for the examination specified in 4.4.2.

TABLE V. Sampling for examination of material.

Number of rolls of sheet or strips or number of gaskets in lot	Number of rolls or gaskets to be examined
1 to 15	All
16 to 40	15
41 to 65	25
66 to 110	35
111 to 300	50
301 to 800	75
801 and over	110

4.4.1.3 Sampling for tests. Representative samples shall be taken at random from each lot that passes the requirements of 4.4.2 in sufficient quantity to conduct the quality conformance tests (see table IV). If the items are of such size or shape that test specimens cannot be prepared from them, a substitute sample shall be provided in the form of a piece or pieces of rubber having dimensions appropriate to the tests required (see 6.3).

4.4.2 Examination.

4.4.2.1 Examination of material. Each of the samples taken in accordance with 4.4.1.2 shall be subject to surface examination for workmanship, dimensions, and tolerances and for all other requirements for which test methods are not specified. Thickness shall be measured in accordance with ASTM F 104. Visual defects shall be determined and evaluated in accordance with MIL-STD-289, MIL-STD-298 and MIL-STD-407. A major defect is a defect that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use of operation of the unit. The material shall also be examined for the items in table VI. If the number of defects exceeds the applicable acceptance number specified in table V, the entire lot represented by the sample shall be rejected.

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TABLE VI. Defects.

Category	Item	Defect
Major		
101	Appearance and workmanship	Not uniform; not homogeneous
102	Shape	Not form specified
103	Dimensions and tolerances	Not as specified
Minor		
201	Appearance and workmanship	Contains dirt or foreign matter
202	Marking	Not legibly identified with cure date as specified; marking missing

4.4.2.2 Examination for age. Material shall be examined for conformance to the age requirement (see 3.2.2). Material over the maximum 12-month age limitation shall be rejected. When the cure date cannot be determined, this shall also be cause for rejection.

4.5 Nonconformance. If any of the samples in the first article tests or quality conformance tests are found not to be in conformance with the requirements of this specification, this shall be cause for rejection. In addition, if a sample fails in a first article test, subsequent lots shall be subjected to the test or tests that failed. This additional testing shall be discontinued and tests returned to the normal basis of 4.4 when four successive lots have been accepted.

4.6 Tests.

4.6.1 Pre-test conditioning. Unless otherwise specified in the test method, all specimens shall be conditioned for 4 hours at 80 ± 9 degrees Fahrenheit ($^{\circ}\text{F}$) (27 ± 5 degrees Celsius ($^{\circ}\text{C}$)). Sample preparations may be done without regard to this criteria.

4.6.2 Tensile strength and ultimate elongation Tensile strength and ultimate elongation shall be determined in accordance with ASTM D 412, using die C specimens of 0.080 ± 0.010 inch.

4.6.3 Hardness. Hardness shall be determined in accordance with ASTM D 2240 using a Shore A durometer.

4.6.4 Specific gravity. Specific gravity shall be determined in accordance with ASTM D 792.

4.6.5 Oven aging. Specimens for the oven aged tensile strength, ultimate elongation, hardness test, and hot compression set test shall be aged in accordance with ASTM D 573 for 94 ± 0.5 hours at $158 \pm 2^{\circ}\text{F}$ ($70 \pm 1.1^{\circ}\text{C}$). Determination of aged tensile strength, ultimate elongation, and hardness properties shall be made not less than 20 hours or more than 48 hours after removal from the oven.

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4.6.6 Tensile strength and ultimate elongation after oven aging. Tensile strength and ultimate elongation shall be determined after oven aging (see 4.6.5) using the procedure specified in 4.6.2.

4.6.7 Hardness after oven aging. Hardness shall be determined after oven aging (see 4.6.5) using the procedure specified in 4.6.3.

4.6.8 Hot compression set. Hot compression set shall be determined in accordance with ASTM D 395. The specimens shall be compressed to 40 percent deflection, then subjected to the conditions specified in 4.6.5.

4.6.9 Flexibility test. The flexibility test shall be conducted in accordance with ASTM F 147 except that each specimen shall be 0.250 ± 0.005 inch thick. The test temperature shall be $\text{minus } 20 \pm 2^{\circ}\text{F}$ ($\text{minus } 29 \pm 1.1^{\circ}\text{C}$).

4.6.10 Extraction in distilled water. The percent extraction shall be determined in accordance with method 6621 of FED-STD-601, except that each specimen shall be 0.080 ± 0.010 inch thick.

4.6.11 Oil resistance. The change in volume of class 1 materials after immersion in medium no. 3 of method 6001 of FED-STD-601 shall be determined by method 6211 of FED-STD-601, except that the immersion time and temperature shall be 70 ± 0.5 hours and $212 \pm 2^{\circ}\text{F}$ ($100 \pm 1.1^{\circ}\text{C}$).

4.6.12 Phosphate ester resistance. The change in volume of class 3 materials after immersion in tri-n-butyl phosphate shall be determined by method 6211 of FED-STD-601, except that the immersion time and temperature shall be 70 ± 0.5 hours and $212 \pm 2^{\circ}\text{F}$ ($100 \pm 1.1^{\circ}\text{C}$).

4.6.13 Fuel resistance. The change in volume of class 5 materials after immersion in medium 6 of method 6001 of FED-STD-601 shall be determined by method 6211 of FED-STD-601, except that the time and temperature of immersion shall be 70 ± 0.5 hours and $73.4 \pm 3.6^{\circ}\text{F}$ ($23 \pm 2^{\circ}\text{C}$).

4.7 Inspection of packaging. Sample packs and the inspection of the preservation, packing and marking for shipment, stowage and storage shall be in accordance with the requirements of section 5 and the documents specified therein.

5. PACKAGING

(The packaging requirements specified herein apply only for direct Government acquisition.)

5.1 General.

5.1.1 Talc/talcum. When used in the preservation process, in dusting for example, talc/talcum shall be asbestos-free (see 6.3).

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5.1.2 Navy shipboard stowage fire-retardant requirements.

5.1.2.1 Lumber and plywood. Unless otherwise specified (see 6.2), all lumber and plywood including laminated veneer material used in shipping container and pallet construction, members, blocking bracing, and reinforcing shall be fire-retardant treated material conforming to MIL-L-19140 as follows:

Level A and B - Type II - Weather resistant.
Category 1 - General use.

Level C - Type I - Non-weather resistant.
Category 1 - General use.

5.1.2.2 Fiberboard. Fiberboard used in the construction of class-domestic, non-weather resistant fiberboard, and cleared fiberboard boxes shall meet the flame spread index and the specific optic density requirements specified in PPP-F-320.

5.1.2.3 Kraft wrapping paper. Kraft wrapping paper used to protect sheet and strip gasket material shall be treated (fire-resistant) paper conforming to A-A-1894 or UU-P-268, type II, class C or D minimum 60-pound basis weight

5.2 Preservation Preservation shall be level A, C, or commercial as specified (see 6.2).

5.2.1 Level A.

5.2.1.1 Sheets. Sheet material shall be tightly rolled and securely tied or banded to prevent unrolling. Rolls shall be individually wrapped with 60-pound minimum basis weight kraft paper and secured with minimum 2-inch width pressure-sensitive or gummed tape. For Navy shipboard stowage requirements, see 5.1.2.3.

5.2.1.2 Strips. Strip material shall be coiled and securely tied to prevent uncoiling. Each coil shall be wrapped as specified in 5.2.1.1 and individually packed in unit containers of the weather- or water-resistant class or variety in accordance with MIL-STD-2073-1, appendix F, table I. Container selection shall be at the option of the contractor. For Navy shipboard stowage requirements, see 5.1.2.2 and 5.1.2.3.

5.2.1.3 Cut, molded, and extruded shapes. Gaskets shall be unit protected, except for the coiling requirements in unit containers as specified for strips.

5.2.2 Level C. Preservation of gasket material shall be as specified for level A except that the unit containers for strips and cut, molded and extruded gaskets shall conform to the domestic, non-weather or water resistant class or variety, as applicable.

5.2.3 Commercial. Commercial packaging (cleaning, preservation, and unit pack) of gasket material shall be in accordance with ASTM D 3951.

5.3 Packing. Packing shall be level A, B, C, or commercial, as specified (see 6.2).

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5.3.1 General requirements for levels A, B, and C. Containers selected (see 5.3.2) shall be of minimum weight and cube, of uniform size, be consistent with the protection required, and contain identical quantities of identical gaskets.

5.3.2 Level A, B, and C containers. Gasket material, preserved as specified (see 5.2), shall be packed in shipping containers for the level of packing specified in accordance with MIL-STD-2073-1, appendix C, table VII, and herein. Unless otherwise specified (see 6.2), container selection shall be at the contractor's option.

5.3.2.1 Caseliners, closure, and gross weight.

5.3.2.1.1 Caseliners. Unless otherwise specified (see 6.2), level A shipping containers with gasket material preserved to level C or commercial requirements shall be provided with waterproof caseliners in accordance with MIL-STD-1186.

5.3.2.1.2 Closure. Container closure, reinforcing, or banding shall be in accordance with the applicable container specification except that weather-resistant fiberboard boxes shall be closed in accordance with method V, reinforced with non-metallic or tape banding, and domestic or fire-retardant fiberboard boxes shall be closed in accordance with method I using pressure-sensitive tape.

5.3.2.1.3 Weight. Wood, plywood, and cleated type containers exceeding 200 pounds gross weight shall be modified by the addition of skids in accordance with MIL-STD-2073-1, appendix F, and the applicable container specification.

5.3.3 Commercial. Gasket material preserved as specified (see 5.2), shall be packed for shipment in accordance with ASTM D 3951 and herein.

5.3.3.1 Container modification. Shipping containers exceeding 200 pounds gross weight shall be provided with a minimum of two, 3- by 4- inch nominal wood skids laid flat, or a skid or sill type base which will support the material and facilitate handling by mechanical equipment during shipment, storage, and stowage.

5.4 Palletized unit loads. When specified (see 6.2), shipping containers shall be palletized in accordance with MIL-STD-2073-1, appendix F.

5.5 Marking. In addition to any other special marking required (see 6.2 and 3.5), interior (unit) packs, exterior shipping containers, and palletized unit loads shall be marked for shipment, stowage, and storage in accordance with MIL-STD-2073-1, appendix F. Marking shall include bar coding and material cure date (quarter and year).

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6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. This material is intended for general gasket use but is not intended for use as a gasket in hatches, air ports, or watertight and airtight doors.

6.2 Acquisition requirements. Acquisition documents must specify the following:

- (a) Title, number, and date of this specification.
- (b) Type and class required (see 1.2).
- (c) Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.1.1 and 2.2).
- (d) First article sample, if required (see 3.1).
- (e) Form of material required (see 3.3).
- (f) Length and thickness of sheet rubber required (see 3.3.1).
- (g) Dimensions of strip rubber required (see 3.3.2).
- (h) Dimension of other rubber forms required (see 3.3.3).
- (i) Identification markings, if other than as specified (see 3.5).
- (j) Inspection conditions, if other than as specified (see 4.2.1).
- (k) When fire-retardant treatment is not required (see 5.1.2.1).
- (l) Level of preservation and packing required (see 5.2 and 5.3).
- (m) When container selection is at contractor's option (see 5.3.2).
- (n) When caseliners are not required (see 5.3.2.1.1).
- (o) Palletization, when required (see 5.4).
- (p) Special marking required (see 5.5).

6.3 Consideration of data requirements. The following data requirements should be considered when this specification is applied on a contract. The applicable Data Item Descriptions (DIDs) should be reviewed in conjunction with the specific acquisition to ensure that only essential data are requested/provided and that the DIDs are tailored to reflect the requirements of the specific acquisition. To ensure correct contractual application of the data requirements, a Contract Data Requirements List (DD Form 1423) must be prepared to obtain the data, except where DoD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

<u>Reference paragraph</u>	<u>DID number</u>	<u>DID title</u>	<u>Suggested tailoring</u>
3.2, 4.4.1.3 and 5.1.1	DI-E-2121	Certificate of compliance	----
4.3	DI-T-4902	First article inspection report	----
4.4	DI-T-5329	Inspection and test reports	----

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The above DIDs were those cleared as of the date of this specification. The current issue of DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

6.4 First article. When first article inspection is required, the contracting officer should provide specific guidance to offerors whether the items should be a preproduction sample, a first article sample, a first production item, a sample selected from the first ____ production items, a standard production item from the contractor's current inventory (see 3.1), and the number of items to be tested as specified in 4.3. The contracting officer should also include specific instructions in acquisition documents regarding arrangements for examinations, approval of first article test results, and disposition of first articles. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government approval is presently appropriate for the pending contract. Bidders should not submit alternate bids unless specifically requested to do so in the solicitation.

6.5 Sampling acceptance. Acceptable numbers for acceptance and rejection are as follows:

Major defects in rolls, strips, or gaskets		Total defects (major plus minor) in rolls, strips, or gaskets (maximum allowable)	
Acceptance number	Rejection number	Acceptance number	Rejection number
0	1	1	2
0	1	1	2
0	1	1	2
1	2	2	3
1	2	3	4
2	3	4	5
3	4	6	7

6.6 Subject term (key word) listing.

Fuel-resistant
Non-metallic
Oil-resistant
Sealing
Vulcanized

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6.7 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:

Army - AV

Navy - SH

Preparing activity:

Navy - SH

(Project 5330-0754)

Review activities:

Army - EA, MI

Navy - AS

DLA - IS, CS

User activity:

Army - ME

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER MIL-G-1149C		2. DOCUMENT TITLE GASKET MATERIALS, SYNTHETIC RUBBER, 50 AND 65 DUROMETER HARDNESS	
3a. NAME OF SUBMITTING ORGANIZATION		4. TYPE OF ORGANIZATION (Mark one)	
b. ADDRESS (Street, City, State, ZIP Code)		<input type="checkbox"/> VENDOR	
		<input type="checkbox"/> USER	
		<input type="checkbox"/> MANUFACTURER	
		<input type="checkbox"/> OTHER (Specify) _____	
5. PROBLEM AREAS			
a. Paragraph Number and Wording			
6. REMARKS			
7a. NAME OF SUBMITTER (Last, First, MI) - Optional		b. WORK TELEPHONE NUMBER (Include Area Code) - Optional	
c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional		8. DATE OF SUBMISSION (YYMMDD)	

(TO DETACH THIS FOR UT ALONG THIS LINE)

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