

INCH-POUND

A-A-55801A
13 February 2012
SUPERSEDING
A-A-55801
22 September 1995

COMMERCIAL ITEM DESCRIPTION

RUBBER, SILICONE; PACKING, PREFORMED (O-RING)

The General Services Administration has authorized the use of this Commercial Item Description for all Federal Agencies.

1. **SCOPE.** This commercial item description (CID) covers a silicone rubber preformed packing (o-ring), of various classes and grades.

2. **CLASSIFICATION.** The silicone rubber shall be of the following classes and grades as specified. The designated grade number corresponds to the nominal Shore Durometer A hardness value.

Class 1A – Low temperature resistant
Grade – 40, 50, 60, 70, and 80

Class 1B – Low temperature resistant and low compression set at high temperature
Grade – 40, 50, 60, 70, and 80

Class 2A – High temperature resistant
Grade – 25, 40, 50, 60, 70, and 80

Class 2B – High temperature resistant and low compression set
Grade – 25, 40, 50, 60, 70, and 80

Class 3A – Low temperature, tear and flex resistant
Grade – 30, 50, and 60

Class 3B – Tear and flex resistant
Grade – 30, 50, 60, 70, and 80

3. SALIENT CHARACTERISTICS.

3.1 **Dimensional and physical requirements.** Dimensional and physical requirements shall conform to SAE AS568. O-rings not made to SAE AS568 shall be identified by a drawing number.

Comments, suggestions, or questions on this document should be addressed to Defense Supply Center Philadelphia (DSCP), ATTN: DSCP-NASA, 700 Robbins Avenue, Philadelphia, PA 19111-5096 or e-mail to dscpg&inspeccomments@dla.mil . Since contact information can change, you may want to verify the currency of this address information using ASSIST Online database at <https://assist.daps.dla.mil> .

A-A-55801A

3.2 Material. Material shall be silicone rubber formulated and processed to meet the physical and mechanical properties per the specified class and grade, when tested in accordance with ASTM test methods specified in Table I of CID A-A-59588.

3.3 Color. Unless otherwise specified, the color of the silicone rubber shall be the natural color of the compound furnished.

3.4 Workmanship. The end product shall be clean, smooth finished, and free from dirt, flash or rough edges.

3.5 Metric products. Products manufactured to metric dimensions will be considered on an equal basis with those manufactured using inch-pound units, provided they fall within specified tolerances using conversion tables contained in the latest revision of ASTM SI 10, and all other requirements of this commercial item description are met. If a product is manufactured to metric dimensions and those dimensions exceed the tolerances specified in the inch-pound units, a request should be made to the contracting officer to determine if the product is acceptable.

4. **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).

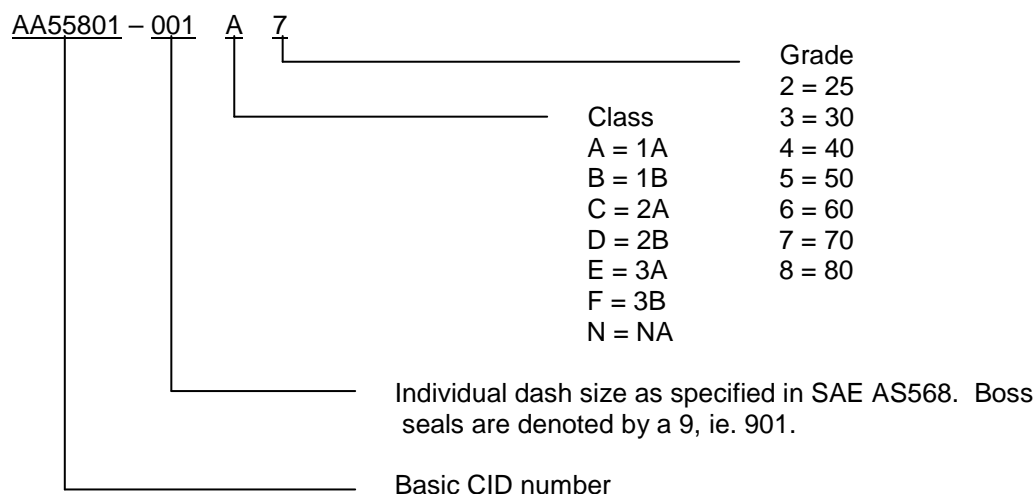
5. PRODUCT CONFORMANCE.

5.1 Product conformance. The products provided shall meet the salient characteristics of this commercial item description, conform to the 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.

6. **PACKAGING**. Preservation, packing, and marking shall be in accordance with SAE AMS 2817 or as specified in the contract or order.

7. NOTES.

7.1 Part identification number (PIN): the following part identification numbering procedure is for government purposes and does not constitute a requirement for the contractor. The PINs to be used for items acquired to this description are created as follows:



A-A-55801A

7.2 Ordering data. The contract or order should specify the following:

- a. Title, number, and date of this CID.
- b. Class and grade required.
- c. Size per SAE AS568 or drawing part number.
- d. Color required if other than natural color of compound furnished.
- e. Packaging requirements.

7.3 Source of documents.

7.3.1 ASTM standards. ASTM standards are available from the ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 or online at <http://www.astm.org> .

7.3.2 FAR. The Federal Acquisition Regulation is available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402 or online at <http://www.arnet.gov/far> .

7.3.3 Government documents. Federal and military documents are available online at <https://assist.daps.dla.mil/quicksearch/> or from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.

7.4 Utilization caution. Use of this material in items that may come in contact with human skin, food, or potable water is not recommended without prior approval of the appropriate medical service.

7.5 Key words.

Class
Flex resistant
Grade
Low compression

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

Military interests:

Civil Agency Coordinating Activity:
GSA - FAS

Custodians:

Army – MR
Navy – AS
Air Force - 11

Preparing activity:
DLA - IS

(Project 5331-2012-001)

Review activities:

Army – AR, CR, MI
Navy – OS, SH, YD
Air Force – 84, 99

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil> .