

# AEROSPACE MATERIAL SPECIFICATIONS

AMS 2817A

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## PACKAGING AND IDENTIFICATION Preformed Packings

1. **ACKNOWLEDGMENT:** A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.
2. **PURPOSE:** To provide protection of preformed packings, primarily "O" rings of synthetic rubber, from contamination by foreign materials prior to installation and to assure positive identification by part number of each piece until it is installed. Unless otherwise specified on the drawing or applicable material specification, color coding of parts is prohibited.
3. **PROCEDURE:**
  - 3.1 **Preparation:** Parts shall be thoroughly cleaned before packaging.
  - 3.2 **Packaging:** Shall be accomplished under conditions which will assure freedom from contamination by dust, oil, grease, and other extraneous matter. No part shall be tied or tagged. Parts shall be packaged one to an envelope. Equal size envelopes may be joined to form strips (See Fig. 1). Envelopes shall be heat sealed on all edges. Parts larger in OD than can be packaged flat in 18 x 18 in. envelopes may be coiled into not more than three coils as shown in Fig. 2 or into three loops as shown in Fig. 3 for convenience in packaging. When parts are coiled or looped, care shall be exercised to avoid possible cold crease effects. When parts are looped, the looping shall be performed in such a manner that the looped packing cross section is not twisted along its length. If the geometry (cross section and ID) of a part is such that the part is subject to settling to the bottom of the envelope in uncontrolled shape, parts shall be coiled as in Fig. 2 or looped as in Fig. 3 and packaged in suitable smaller size envelopes or shall be packaged with sufficient filler packing or cardboard preforms to prevent such uncontrolled settling.
    - 3.2.1 **Envelope Sizes:** The envelope used for each part number should be not larger than necessary to enclose the part to be packaged without causing deformation or crowding of the part in the envelope. The inside dimension "A" and the width of heat seal dimension "B" (See Fig. 1) of envelopes, the recommended maximum ring OD for each envelope size, and the standard size rings to be packed in each without coiling or looping shall be as follows:

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Dimension A Inches	Dimension B Inch, max	Recommended Max Ring OD Inches	Standard Ring Sizes (from ARP 568)
2± 1/4	3/8	1-1/2	-001 thru -028, -110 thru -126, -210 thru -217, -901 thru -916
3± 1/2	1/2	2-1/4	-029 thru -033, -127 thru -137, -218 thru -224, -325 thru -327 -918 thru -924
4± 1/2	1/2	3	-034 thru -039, -138 thru -148, -225 thru -231, -328 thru -333 -928 thru -932
6± 1/2	1/2	5	-040 thru -048, -149 thru -158, -232 thru -247, -334 thru -349
8± 1/2	1/2	7	-049 thru -050, -159 thru -166, -248 thru -260, -425 thru -438
12± 1/2	1/2	10-1/2	-167 thru -178, -261 thru -274, -439 thru -448
16± 1/2	1/2	14-1/2	-275 thru -280, -449 thru -456,
18± 1/2	1/2	16-1/2	-281, -457 thru -460

3.2.1.1 If the space required to imprint on the envelope all the information required by Section 5 with the equipment available is too large to permit use of 2 x 2 in. or 3 x 3 in. envelopes, rings which would normally be packaged in such envelopes may be packaged in 4 x 4 in. envelopes.

3.2.2 Envelope Construction: Unless otherwise specified, envelopes shall be of either of the following constructions; Type I construction is preferred.

3.2.2.1 Type I. Both faces of natural kraft paper of 30 lb min wt per ream lined with polyethylene film not less than 0.0005 in. thick.

3.2.2.2 Type II. One face as in 3.2.2.1 and the other of 300 gage cellophane coated with polyethylene film not less than 0.0005 in. thick.

#### 4. TECHNICAL REQUIREMENTS:

4.1 Workmanship: Packages shall be fabricated in a neat and workmanlike manner. Particular attention shall be given to cleanliness of the packaged parts, thoroughness of heat sealed seams, and legibility of marking.

4.2 Heat Seal Bond Strength: Sections of the heat seal 1 in. in length shall be obtained by cutting perpendicular to the line of the seal from envelopes opened for inspection and test of the contained parts. Length of legs of specimens is unimportant. Specimen shall be unfolded and clamped in jaws with the line of the seal perpendicular to the direction of load application and midway between jaws. A static load of 2 lb shall be applied slowly and uniformly without impact and allowed to act for 5 min. at temperature of 20 - 30 C (68 - 86 F). Separation of more than 25% of the width of the seam or delamination of laminated envelope material at the seal area shall be cause for rejection.

5. MARKING: Each envelope shall be marked with the following minimum information in the sequence shown  
Ø (See Fig. 4 for marking example and acceptable abbreviations); each item, except part name and manufacturer's identification and/or contractor, shall be identified on the package:

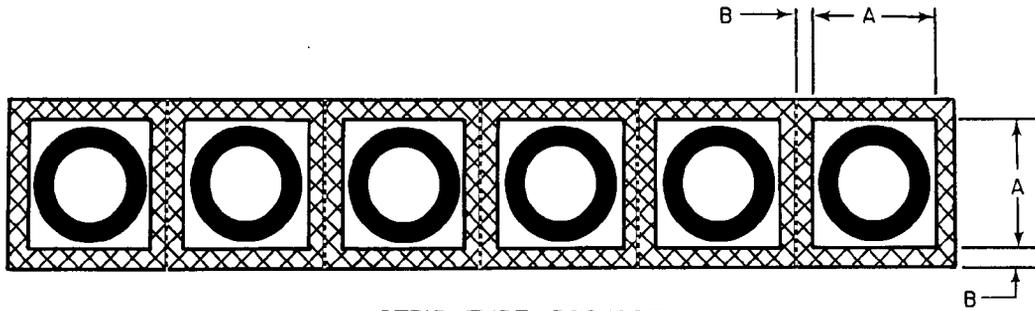
- STOCK NUMBER (When directed by purchaser) \_\_\_\_\_
- PART NAME \_\_\_\_\_
- QUANTITY (Units) \_\_\_\_\_
- GOVERNMENT CONTRACT NUMBER (When directed by purchaser) (See 5.1) \_\_\_\_\_
- PACKAGED (Month and year) PER AMS 2817 \_\_\_\_\_
- DATE OF CURE (By quarter and year) (See 5.2) \_\_\_\_\_
- PART NUMBER \_\_\_\_\_
- MANUFACTURER'S IDENTIFICATION AND/OR CONTRACTOR \_\_\_\_\_
- MATERIAL SPECIFICATION \_\_\_\_\_

5.1 If parts are purchased from the manufacturer under one contract number and sold, without being re-packaged, by the contractor to the consumer under a different contract number, the original contract number shall be crossed out and the new contract number applied in the heat seal area of the envelope. Neither obliteration of the original number nor printing of the new number shall be permitted to deform or load the contained part.

5.2 For parts made of materials not requiring cure date control, such as silicone and fluorocarbon elastomers, the word "CURED" shall appear on the package but the date by quarter and year shall be omitted.

NOTE. SIMILAR SPECIFICATIONS: MIL-P-4861 is listed for information only and shall not be construed as an acceptable alternate unless all requirements of this AMS are met.

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STRIP TYPE PACKAGE

- Note 1 Cross hatchings indicate sealed area of envelope
- Note 2 Dash lines indicate perforations for tear off

Figure 1

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ALTERNATE METHOD OF COILING RINGS

Figure 2