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4 Dec 1970
SUPERSEDING
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26 November 1963

MILITARY SPECIFICATION

SEALING COMPOUND, INERT (FOR USE IN AMMUNITION)

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

1. SCOPE

1.1 Scope. This specification covers inert sealing compound for use as a nonreactive material for sealing, padding, or a combination of both in the nose and tail portions of the explosive cavity of bombs. (See 6.1.)

*1.2 Classification. The sealing compound shall be of the following types, as specified (see 6.2):

Type I	Suitable for use with TNT, tritonal, picratol, and Minol-2
Type II	Suitable for use with TNT, H-6, tritonal, Composition B, picratol, and Minol-2.

2. APPLICABLE DOCUMENTS

*2.1 The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of the specification to the extent specified herein.

SPECIFICATIONS

Federal

RR-S-366	Sieve, Test
PPP-D-723	Drum, Fiber

Military

MIL-T-248	Trinitrotoluene (TNT)
MIL-M-14745	Minol-2 Composition
MIL-E-22267	Explosive Compositions, HBX Type

STANDARDS

Military

MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129	Marking for Shipment and Storage
MIL-STD-147	Palletized and Containerized Unit Loads 40 inch × 48 inch Pallets, Skids, Runners or Pallet Type Base

(Copies of documents, other than specifications and standards, required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer. Specifications and standards are available from the U. S. Naval Publications and Forms Center, 5801 Tabor Ave., Philadelphia, Pa. 19120.)

*2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply.

American Society for Testing and Materials

D 217	Test for Cone Penetration of Lubricating Grease
D 127	Drop Melting Point of Petroleum Wax Including Petrolatum

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

Consolidated Classification Committee

Uniform Freight Classification Rules

(Application for copies should be addressed to the Consolidated Classification Committee, 202 Chicago Union Station, Chicago, Ill. 60606.)

3. REQUIREMENTS

3.1 Qualification. The inert sealing compound furnished under this specification shall be a product which has been tested and has passed the qualification tests specified herein, and has been listed on or approved for listing on the applicable qualified products list (see 4.3 and 6.3).

*3.2 Material. The sealing compound shall be a product of high quality, suitable for the purpose intended, and so manufactured as to meet the requirements specified herein.

*3.3 Composition. The sealing compound shall be a combination of glyceryl ester of rosin or natural hydrocarbon resin of fossil origin, hydrated aluminum silicate, hydrocarbon wax, and petrolatum. Compositions suggested for use in the manufacture of each type sealing compound are listed in 6.4.

*3.4 Exudation. The maximum exudation at 71° C (160° F), shall be 0.3 percent. The sample after testing shall not have exceeded its original diameter at any point by more than 0.03 inch. The sample shall be tested as specified in 4.5.1.

3.5 Stability. The sealing compound shall show no separation or settling which is not easily reincorporated by stirring when tested as specified in 4.5.2.

3.6 Pourability. The sealing compound shall give a minimum of an 8-inch-diameter circle when tested as specified in 4.5.3. There shall be no visible lumps in the pour.

3.7 Penetration. The normal unworked penetration of the sealing compound shall be not less than 5 or more than 15 when tested as specified in 4.5.4.

*3.8 Reactivity. When the sealing compound is subjected to the vacuum stability test at 100° ± 0.5° C for 48 hours as specified in 4.5.5, the amount of reactivity gas over and above that generated by the controls shall not exceed the maximum gas volume specified in table I.

Table I. Reactivity Requirements

Type sealing compound	Maximum gas volume in milliliters					
	TNT	Tritonal	Picratol	H-6	Composition B	Minol-2
Type I	4.0	4.0	2.0	-	-	3.5
Type II	2.0	2.0	2.0	3.0	2.0	3.5

*3.9 Softening point. The softening or melting point of the sealing compound shall not be less than 81° C when tested as specified in 4.5.6.

*3.10 Workmanship. The inert sealing compound shall be homogeneous, free from grit, foreign matter, lumps, or other defects that could adversely affect its intended use.

4. QUALITY ASSURANCE PROVISIONS

*4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier 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 the specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.2 Classification of inspection. The inspection of the sealing compound shall be classified as follows:

(a) Qualification inspection (4.3)
(b) Quality conformance inspection (4.4).

4.3 Qualification inspection. The qualification inspection shall consist of a review for approval of the submitted manufacturer's reports and examination and testing of the qualification sample (4.3.1) to determine conformance to the requirements of this specification.

*4.3.1 Qualification samples. Three copies of the manufacturer's test report showing the formula number of the sealing compound, formulation and composition of the compound including the identification of ingredient samples by specific chemical name in addition to trade name, and laboratory data showing complete test results required by this specification with the exception of the reactivity test (4.5.5) shall be submitted with the qualification samples. Qualification test samples shall consist of seven 1-pound samples and one 5-pound sample of each type of sealing compound and one 1-pound sample of each ingredient used in the formulation. The material samples shall be packaged in suitable containers and plainly identified by securely attached durable tags marked with the identification information required. The sealing compound samples shall be marked with the following information:

(a) Sealing compound, inert (for use in ammunition)

(b) Type

(c) Name and address of manufacturer

(d) Location and identity of the plant which produced the samples tested

(e) Manufacturer's identification

(f) Date of manufacture

(g) Submitted by (name) (date), for qualification tests in accordance with the requirements of MIL-S-3105C, under authorization of (reference authorizing letter) (see 6.3).

The ingredient samples shall be marked with the following information:

(a) Ingredient for use in sealing compound (inert)

(b) Trade name and specific chemical name of ingredient

(c) Ingredient manufacturer

(d) Name and address of sealing compound manufacturer

(e) Date of manufacture

(f) Submitted by (name) (date), for qualification tests in accordance with the requirements of MIL-S-3105C, under authorization of (reference authorizing letter) (see 6.3).

*4.3.1.1 Transmittal of samples. Type I or type II samples prepared as specified in 4.3.1 shall be submitted to the Commanding Officer, Naval Ordnance Station, Indian Head, Md. 20640, Attention: Chemical Analysis Branch for Qualification Inspection.

*4.3.2 Retention of qualification. The supplier shall retain test data accumulated from performance of quality conformance inspections. Data collected during a 12-month interval shall be forwarded to the Naval Ordnance Station, Indian Head, at the end of each 12-month interval. The purpose of the collection and submittal of test data is to show continuing conformance of the product with the requirements of this specification. Failure to submit this periodic feedback of test data shall result in loss of qualification for that product. In addition, the supplier shall immediately notify the qualifying activity, the Naval Ordnance Station, Indian Head, Md. 20640, when his product no longer meets the qualification requirements of this specification or when production of the suppliers product has been terminated. Any change in formulation of the sealing compound greater than ±1.0 percent for any ingredient shall require requalification of the new sealing compound.

*4.4 Quality conformance inspection. For each inspection lot of material submitted for acceptance, quality conformance inspection shall consist of all the examinations and tests of this specification with the exception of the reactivity test (4.5.5).

*4.4.1 Inspection lot. An inspection lot shall consist of the same type inert sealing compound produced by one manufacturer, at one plant, from the same materials, and under essentially the same manufacturing conditions provided the operation is continuous. In the event the process is a batch operation, each batch shall constitute a lot (see 6.5).

*4.4.2 Sampling

*4.4.2.1 For examination of preparation for delivery. Sampling for examination of preparation for delivery shall be conducted in accordance with MIL-STD-105.

*4.4.2.2 For test and visual examination. Sampling for test and visual examination of the sealing compound shall be conducted in accordance with table II. A sufficient amount of sample shall be removed from each container to provide for approximately 4 pounds of sealing compound. Each sample shall be removed by means of a sharp metallic instrument or other suitable means, taking precaution to avoid contamination and to obtain a representative sample from below

the surface layer. The sample removed from each sample container shall be placed in a suitable air-tight, clean, dry glass container labeled to identify the lot and container from which it was taken.

Table II. Sampling for Test and Visual Examination

Number of containers in batch or lot	Number of sample containers
2 - 25	2
26 - 150	3
151 - 1,200	5
1,201 - 7,000	8
7,001 - 20,000	10
Over 20,000	20

*4.4.3 Inspection procedure

*4.4.3.1 For examination of preparation for delivery. The sample unit shall be one filled and closed shipping container ready for shipment. Sample containers and the preparation for delivery thereof shall be examined for compliance with all requirements of this specification in regard to contents, closure, damaged or leaking container, improper container, and marking. The inspection level shall be level I and the acceptable quality level (AQL) shall be 2.5 percent defective. The sample containers shall be shipped as part of the lot if the lot is accepted.

*4.4.3.2 For test. Approximately equal portions of all of the specimens taken in 4.4.2.2 shall be thoroughly mixed to form a composite specimen of no less than 3 pounds. The composite specimen shall be subjected to all the tests specified in 4.5 with the exception of the reactivity test. Failure of any test sample to meet any test requirement shall be cause for rejection of the lot represented.

*4.4.3.2.1 For visual examination. The samples taken in 4.4.2.2 shall be visually examined for conformance to all the requirements of 3.10. Failure of any sample to meet any requirement shall be cause for rejection of the lot represented.

4.5 Test methods

*4.5.1 Exudation. Remove about 3 cubic inches of the sample and melt at approximately 200° F. When completely molten, the sealing compound shall be cooled, with stirring, to about 15° F above its drop melting point and cast into a cylindrical mold of glass, metal, or thermoset plastic 1 ± 0.030-inch inside diameter and 0.5 ± 0.030 inch

high. The glass mold shall rest on a smooth 0.5-inch-thick aluminum plate and, at the time of casting, both plate and mold shall be at 70° ± 10° F. Under these conditions the sample will freeze in 3 to 5 minutes. The sample shall be removed from the mold and placed on 20 layers of filter paper cut in 1-1/2-inch-diameter circles. An 80-gram brass weight, 1 inch in diameter, shall be placed on top of the sealing compound casting. The assembly shall then be placed on a wire screen and stored in a forced draft oven for 24 hours at 160° F, minus 0° F, plus 3° F. Before assembly, measure the diameter of the sealing compound casting to the nearest 0.01 inch with a micrometer; also the brass weight shall be weighed and then reweighed with the sealing compound casting. After hot storage, the sealing compound and brass weight shall be removed from the filter paper while still warm, no attempt being made to separate brass weight and sealing compound, and allowed to cool upside down (the sealing compound resting on the brass weight). When cool, the sealing compound and brass weight shall be weighed together. Measure the diameter as above. The difference in weights shall be calculated as percent lost during exudation. The difference in diameter shall be calculated to determine if its original diameter has changed.

4.5.2 Stability. Maintain approximately 2 pounds of the compound at 205° to 212° F for 24 hours in a pint can. Stir the compound and observe for ease of incorporation of the ingredients for conformance to 3.5 and then run the test described in 4.5.3.

*4.5.3 Pourability. Heat a suitable container of the blended sealer until the sample is uniformly at 190° F. Place a piece of no. 30 Kraft paper, 12 × 12 inches, on a platform scale at room temperature. The entire area of the paper shall be supported on a horizontal surface of the platform scale. Pour the melted sealer rapidly onto the center of the paper from a height of 6 ± 1/2 inches until 227 ± 5 grams have been added. Time of pour shall not exceed 1 minute. During the pour, check for visible lumps for conformance to 3.6. Allow pour to remain for 30 minutes. Measure the diameter of the circle formed by the sealer when flow has been stopped but not later than 30 minutes after pouring for conformance to 3.6.

4.5.4 Penetration. Penetration of the sealing compound shall be determined in accordance with ASTM D 217. Replace the cone with a needle and weight of 150 grams so that the moving weight in the test is 200 grams. Use a 2.5-gram needle having the following dimensions:

Length (approx.)	50.8 mm
Diameter	1.00 to 1.02 mm
Height of truncated cone at pointed end (approx.)	6.35 mm
Angle of truncated cone	8° 40' to 9° 40'
Diameter of tip	0.14 to 0.16 mm

Follow the directions for the determination using the procedure for unworked penetration.

4.5.5 Reactivity test. Reactivity for each type of sealing compound with the explosives listed in table I shall be determined in accordance with the vacuum stability test procedures of 4.5.5.1 through 4.5.5.5. The explosives to be used in the reactivity test shall be in accordance with the requirements of MIL-T-248, MIL-M-14745, and MIL-E-22267, as listed in 2.1.

*4.5.5.1 Vacuum stability test. The vacuum stability test is carried out in a glass unit, figure 1. The vacuum stability test chamber may consist of an aluminum block or oil bath with thermoregulator capable of maintaining a test temperature of 100° ± 0.5° C when testing with TNT, H-6, Tritonal, picratol, Composition B, and Minol-2.

4.5.5.2 Calibration of glass tube. Determine the volume in milliliters (ml) of the 15.5-centimeter (cm) heating tube (Scientific Glass Apparatus, catalog no. JV-6850 or equivalent) by running in mercury from a buret until the tube is filled to the level at which the ground glass joint of the capillary tube will make contact with the mercury. Subtract from the indicated buret readings, the volume of explosive used in the test. The difference shall be represented by the symbol A. Transfer 7.0 ml of mercury to the cup at the lower end of the capillary tube. Clamp the tube in an upright vertical position, and measure the height in millimeters (mm) of the mercury column in the capillary tube (approximately 25 mm). Measure the length in millimeters of each of the three parts of the capillary tube and add these values to obtain total length. From the total length subtract the height of the mercury column in the cup as previously obtained. Represent this difference by the symbol B_1. From the total length subtract the height of the column of mercury in the cup measured at the end of the test described in 4.5.5.3. Represent this difference by the symbol B. Determine the capacity of the capillary tube per unit of length as follows: transfer an accurately weighed sample of approximately 10 grams of mercury to the cup at the lower end of the capillary tube. Manipulate the tube so that when it is horizontal, mercury is contained in a continuous section of the longest part of the tube and measure the length of the mercury column. Repeat this twice with the mercury in two other parts of the long section of the tube. Calculate the average of the three measured lengths of the mercury column. Represent the unit capacity in milliliters per millimeters of the capillary tubing by the symbol C. This can be obtained from the formula:

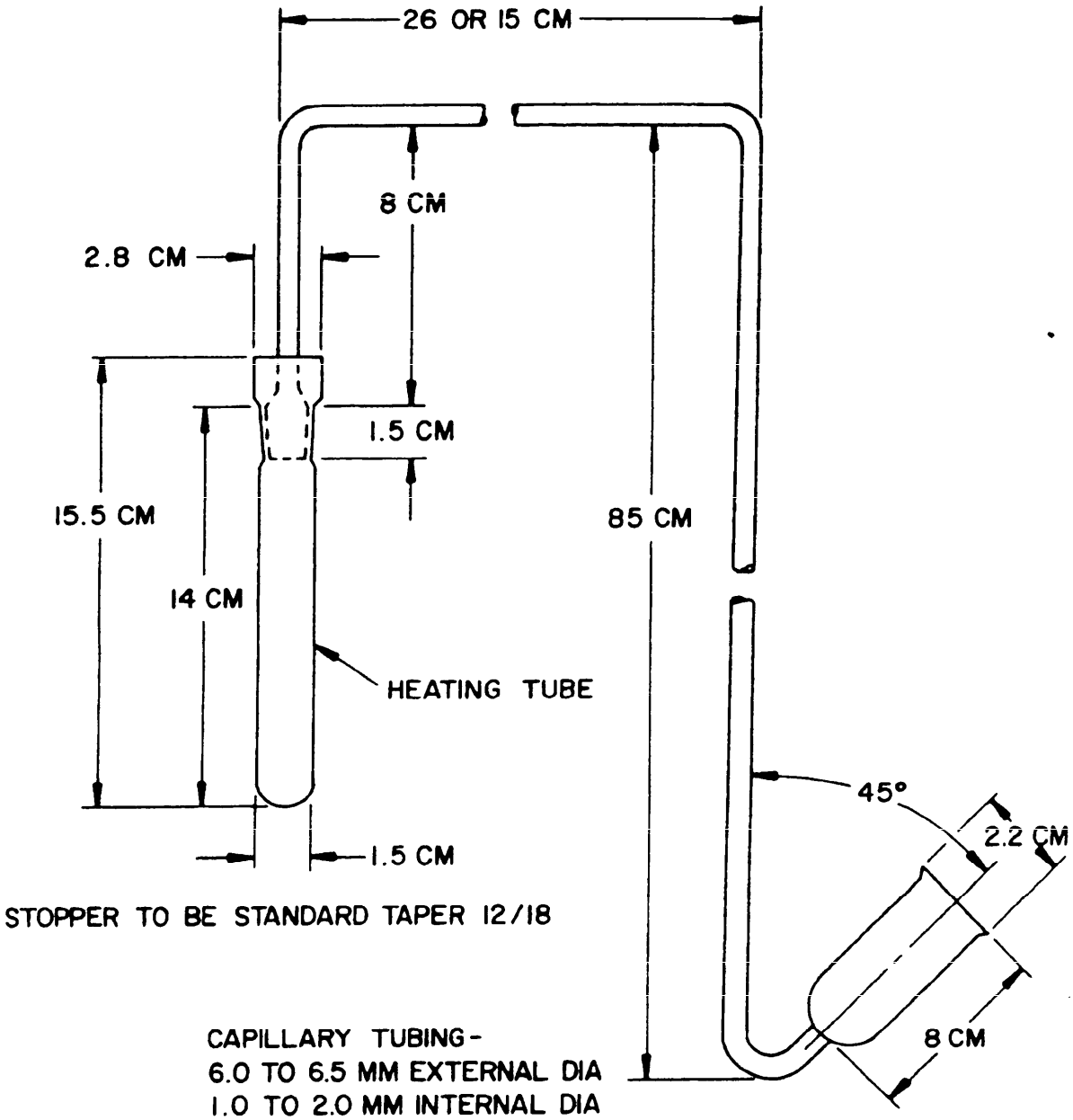

Figure 1. - Apparatus For Vacuum Stability Test

$$C = \frac{W}{DL}$$

where

C = Unit capacity of capillary tubing in milliliters per millimeters
W = Grams of mercury
D = Density of mercury at temperature of determination
L = Average measured lengths of mercury column in millimeters.

4.5.5.3 Test procedure. Use 2N + 1 (where N equals the number of explosives used) tubes similar to the heating tube portion of the apparatus shown in the vacuum stability test method. For controls, add 2.5 grams of the sealing compound to one tube and 2.5 grams of each explosive to additional individual tubes. Place uniform mixtures of 2.5/2.5 grams of the sealing compound and each of the explosives specified in the test in single separate tubes. Connect the respective heating tubes with the capillary tubes. Clamp the apparatus so that the long section of the capillary tube is in a nearly vertical position. Transfer 7.0 ml of mercury to the cup at the lower end of the capillary tube. Connect a vacuum pump to the lower end of the capillary tube and evacuate the system until the pressure is reduced to approximately 5 mm of mercury. (Evacuation of the capillary tube is facilitated by placing the cup of the tube in a horizontal position so that mercury does not block the capillary opening.) After evacuation, disconnect the pump. Seal the connection between the capillary tube and the heating tube with silicone high vacuum grease. Measure the total vertical height of the column of mercury in the capillary tube. Measure and subtract the vertical height of the mercury in the cup. The difference shall be represented by the symbol H_1. Note the room temperature (t_1) and the barometric pressure. Subtract the value H_1 from the barometric pressure in millimeters. Represent this difference by the symbol P_1. Insert the heating tube in the vacuum stability test chamber. Maintain at the proper test temperature for 48 hours (see 4.5.5.1). Remove the heating tube and capillary tube assembly from the bath and allow to cool to room temperature. Measure the total vertical height of the column of mercury in the capillary tube and subtract the vertical height of the mercury in the cup. This difference shall be represented by the symbol H. Note the room temperature (t) and the barometric pressure in millimeters. Subtract the value H from the final barometric pressure in millimeters, represent this difference by the symbol P.

*4.5.5.4 Calculation of liberated gas volume. Calculate the volume of gas in milliliters, at standard conditions, liberated in the test described in 4.5.5.3, using the values described by the symbols in 4.5.5.2 and 4.5.5.3 in the following formula:

$$V = \frac{[A + C\ (B - H)]\ 273\ P}{760\ (273 + t)} - \frac{[A + C\ (B_1 - H_1]\ 273\ P_1}{760\ (273 + t_1)}$$

where

A = Volume in milliliters of heating tube minus volume of explosive in test
B = Total length of capillary tube in millimeters minus height of mercury column in the cup measured at end of test
B_1 = Total length of capillary tube in millimeters minus height of mercury column in the cup measured before the test
C = Unit capacity of capillary tubing in milliliters per millimeters
H = Total vertical height of column of mercury in capillary tube minus the vertical height of the mercury in the cup in millimeters after test
H_1 = Total vertical height of column of mercury in capillary tube minus the vertical height of the mercury in the cup in millimeters before test
P = The value H subtracted from the final barometric pressure in millimeters
P_1 = The value H_1 subtracted from the initial barometric pressure in millimeters
t = Temperature of the room in degrees centigrade after test
t_1 = Temperature of the room in degrees centigrade before test.

*4.5.5.5 Calculation of reactivity. Calculate the reactivity gas of each of the explosive materials with the sealing compound as follows:

Reactivity gas in milliliters = X - (Y + Z)

where

X = milliliters of gas produced by the mixture of explosive material and inert sealing compound
Y = milliliters of gas produced by the explosive material alone
Z = milliliters of gas produced by the inert sealing compound alone.

*4.5.6 Melting point. The melting point shall be determined in accordance with ASTM D 127.

*4.5.6.1 Alternate melting point. The peak endotherm of a thermogram obtained with a Differential Scanning Calorimeter (Perkin-Elmer Model DSC-1B, or equivalent) corresponds to the drop melting point as specified in ASTM D 127 provided the material does not contain a gelling agent that permits it to be melted but still not flow. The DSC may be used for determining the melting point of the inert sealer. Proceed as described in the DSC manual for volatile materials using an empty sealed pan as a reference and using a sealed pan for the sample. The melting point should be determined with an instrument sensitivity setting of four, a heating rate of 10° C per minute, a chart speed of 1 inch per minute, and nitrogen gas for sweeping the instrument.

5. PREPARATION FOR DELIVERY

*5.1 Preservation and packaging. Not applicable.

5.2 Packing

5.2.1 Level A. Not applicable.

5.2.2 Level B. Fifty pounds of material shall be packed in type II grade C drums conforming to PPP-D-723. The inside surface of the container shall be treated with a suitable release agent which will not contaminate the contents and which will promote ready removal of content. Each drum shall be furnished with a top heading. Drums shall be palletized in accordance with MIL-STD-147.

5.2.3 Level C. Fifty pounds of material shall be packed in fiber drums conforming to rule 51 or in package no. 1060 of the Uniform Freight Classification. The inside of the container shall be treated with a suitable release agent which will not contaminate the contents and which will promote ready removal of content. A uniform quality of drums shall be securely fastened to a disposable pallet of sufficient strength to assure safe loading, delivery to, and unloading by first consignee.

*5.3 Marking. Marking for shipment shall be in accordance with MIL-STD-129.

6. NOTES

6.1 Intended use. Inert sealing compound covered by this specification is intended for use as a nonreactive material either for sealing, padding, or a combination of both in the nose and tail portion of the explosive cavity of bombs where application is made by a melting and casting process.

6.2 Ordering data. Procurement documents should specify the following:

(a) Title, number, and date of this specification
(b) Type of sealing compound required (see 1.2)
(c) Quantity in pounds
(d) Whether level B or C packing is required (see 5.2.2 and 5.2.3).

*6.2.1 Level B packing shall be used only when it is known that the material on order is to be used by an ammunition loading activity in Alaska or outside the North American Continent. All other procurements shall be level C.

*6.3 Qualification. With respect to products requiring qualification, awards will be made only for products which are at the time set for opening of bids, qualified for inclusion in the applicable Qualified Products List whether or not such products have actually been so listed by that date. The attention of the suppliers is called to this requirement, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. The activity responsible for the Qualified Products List is the Naval Ordnance Systems Command, Department of the Navy, Wash., D. C. 20360; however, information pertaining to qualification of type I and type II sealing compound may be obtained from the Commanding Officer, Naval Ordnance Station, Indian Head, Md. 20640, Attention: Chemical Analysis Branch.

*6.4 Manufacturing data. The compositions listed in table III are considered satisfactory for use in manufacturing inert sealing compound to meet the requirements of this specification.

*6.5 Batch. A batch is defined as that quantity of material which has been manufactured by some unit chemical process or subjected to some physical mixing operation intended to make the final product substantially uniform.

Table III. Composition (Percent by Weight)

Ingredients[1]	Type I	Type II	Alternate Type II
Glyceryl ester of rosin[2]	39.25 ± 1.00	-	-
Glyceryl ester of disproportioned rosin[3]	-	45.0 ± 1.0	-
Hydrated aluminum silicate[4]	39.75 ± 1.00	40.0 ± 1.0	41.25 ± 0.30
Hydrocarbon wax[5]	12.25 ± 1.00	10.0 ± 0.5	20.00 ± 0.50
Petrolatum[6]	8.75 ± 0.50	5.0 ± 0.2	16.50 ± 0.50
Natural hydrocarbon resin of fossil origin[7]	-	-	22.25 ± 0.30

[1]The combination of resins, plasticizer, and wax should be heated at a temperature not exceeding 450° F and stirred until thoroughly mixed. The Kaolin is then added with continuous agitation to prevent the formation of lumps and to insure the wetting of Kaolin particles. Overheating or segregation of the ingredients while cooling should be prevented.
[2]Ester gum of a melt point of 78° C to 80° C has been found satisfactory for this use.
[3]Glyceryl ester of disproportioned rosin is a hydrogenated rosin ester.
[4]A commercial grade of Kaolin of such granulation that a maximum of 2 percent is retained on a no. 325 U.S. Standard sieve conforming to RR-S-366.
[5]Wax of a solidification point of 167° F to 170° F has been found suitable for use in this compound.
[6]Unbleached petrolatum with a dropping point of approximately 55° C has been found suitable for use in this compound.
[7]A commercial grade of natural hydrocarbon resin of fossil origin may be used.

*6.6 Changes from previous issue. The margins of this specification are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:
Army - MR
Navy - OS
Air Force - 84

Preparing Activity
Navy - OS
(Proj. No. 8030-0364)

Review activities:
  Army - MR, MU
  Navy - OS
  Air Force - 70, 84

User activities:
  Navy - AS, MC

Review/user information is current as of date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current DODISS.

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-S-3105	2. DOCUMENT DATE (YYMMDD) 701204

3. DOCUMENT TITLE
SEALING COMPOUND, INERT (FOR USE IN AMMUNITION)

4. NATURE OF CHANGE (*Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.*)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (*Last, First, Middle Initial*)	b. ORGANIZATION	
C. ADDRESS (*Include Zip Code*)	d. TELEPHONE (*Include Area Code*) (1) Commercial (2) DSN (*If applicable*)	7. DATE SUBMITTED (*YYMMDD*)

8. PREPARING ACTIVITY

a. NAME Commander, Indian Head Division Naval Surface Warfare Center	b. TELEPHONE (*Include Area Code*) (1) Commercial 301-744-1973 (2) DSN 354-1973
c. ADDRESS (*Include Zip Code*) Engineering Documentation (Code 4230) 101 Strauss Avenue Indian Head, MD 20640-5035	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman Road, Suite 2533 Fort Belvoir, VA 22060-6221 Telephone (703) 767-6888 DSN 427-6888