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METRIC
MIL-L-25567D
15 June 1983
SUPERSEDING
MIL-L-25567C
9 June 1971

MILITARY SPECIFICATION

LEAK DETECTION COMPOUND, OXYGEN SYSTEMS (METRIC)

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

1. SCOPE.

This specification covers a gas leak detection compound that is compatible with oxygen.

1.1 Types.

Type I - for use in a temperature range of $1^{o}C$ to $70^{o}C$.

Type II - for use in a temperature range of $-54^{o}C$ to $1^{o}C$.

2. APPLICABLE DOCUMENTS.

2.1 Government Documents. Unless otherwise specified, the following specifications, standards, and handbooks of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DoDISS) specified in the solicitation form a part of this specification to the extent specified herein.

Specifications:

Federal

QQ-A-250/4	Aluminum Alloy 2024, Plate and Sheet
QQ-A-250/5	Aluminum Alloy Alclad 2024, Plate and Sheet
QQ-C-576	Copper Flat Products with Slit, Slit and Edge Rolled, Sheared, Sawed, or Machined Edges (Plate, Bar, Sheet, and Strip)
QQ-P-416	Plating Cadmium (Electrodeposited)
PPP-B-636	Box, Fiberboard
PPP-C-569	Containers, Plastic Molded (for Liquids, Parts, and Powders)

Military

MIL-S-7952	Steel, Sheet and Strip, Uncoated, Carbon (1020 and 1025)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: SA-ALC/SFTT/Kelly AFB 78241 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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MIL-A-8625	Anodic coatings for Aluminum and Aluminum Alloys
MIL-T-43566	Tape, Textile, Cotton, General Prupose
MIL-D-43703	Drum, Molded Polyethylene

Standards

Federal

FED-STD-313	Material Safety Data Sheets, Preparation and Submission of

Military

MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
MIL-STD-129	Marking for Shipment and Storage
MIL-STD-147	Palletized Unit Loads
MIL-STD-831	Test Reports, Preparation of
MIL-STD-1188	Commercial Packaging of Supplies and Equipment

(Copies of specifications, standards, drawings, and publications required by suppliers in connection with specific acquisition functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following document(s) form a part of this specification to the extent specified herein. The issues of the documents which are indicated as DoD adopted shall be the issue listed in the current DoDISS and the supplement thereto, if applicable.

AMERICAN SOCIETY FOR TESTING AND MATERIALS

ASTM STANDARDS

D92	Test for Flash and Fire Points by Cleveland Open Cup
D1173	Test for Foaming Properties of Surface-Active Agents
D1177	Test for Freezing Point of Aqueous Engine Antifreeze Solutions
D1292	Test for Odor in Water

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

NATIONAL MOTOR FREIGHT CLASSIFICATION RULES

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Association, Inc., Traffic Department, 1616 P Street, N.W., Washington DC 20036.)

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UNIFORM FREIGHT CLASSIFICATION RULES

Uniform Freight Classification Committee

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

(Industrial association specifications and standards are generally available for reference from libraries. They are also distributed among technical groups and using Federal agencies.)

3. REQUIREMENTS.

3.1 Composition. The compound shall be liquid, free from any sediment or suspended matter and miscible with water in all proportions. The compound shall not contain:

a. Mineral oil, vegetable oil, animal oil or fats.

b. Any material that will ignite or explode when in contact with liquid or gaseous oxygen.

c. Materials that will act as primary skin irritants, skin sensitizers, or produce any other dermatosis.

d. Ketones, aldehydes, and alcohols as components in the formulation.

3.2 Odor. The compound shall not possess or produce any objectionable odors when tested as specified in 4.4.1. The threshold odor number will be a maximum of 1 with a maximum odor intensity index of 0.

3.3 pH Value. The compound shall have a pH value between 6.0 and 7.5 when tested at 21°C (see 4.4.2).

3.4 Nonflammability. The compound shall not supported combustion below 100°C when tested by use of a Cleveland Open Cup (See 4.4.3).

3.5 Leak Detection. The compound (both types) shall pass the leak detection test specified in 4.4.4.

3.6 Foaming Ability. The compound shall produce an initial foam height of not less than 145 mm and a foam height of 130 mm after standing for five minutes (see 4.4.5).

3.7 Freezing Point. Type II only shall have a freezing point of -60°C or below (see 4.4.6).

3.8 Residue. The compound shall not contain more than 0.50 percent total residue (see 4.4.7).

3.9 Corrosiveness. The compound shall pass the corrosion tests specified in 4.4.8.

3.10 Compatability with Oxygen. The compound shall pass the test specified in 4.4.9.

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3.11 Mold Growth. The solution shall not support mold growth within the container during use or storage as specified in 4.4.10.

3.12 Preproduction Inspection. Preproduction inspection shall be performed as specified in 4.2.

3.13 Containers. Type I compound for 1 liter quantity or less shall be bottled in a commercial squeeze type, oval bottle. The bottle shall be made of polyethylene with a suitable rough finish on the neck to minimize slipping. The color of the bottle shall be transparent yellow. The bottle's closure fitting shall consist of a nozzle and nozzle cap. The stem shall have an orifice of 0.07 mm diameter. The bottle closure shall be made of the same material as the bottle. Type II compound shall be bottled in a container similar to that used in Type I, except the color of the bottle shall be clear transparent for 1 liter quantity or less.

3.14 Additional Markings. The following instructions shall be printed on each container of compound by a silk screen printing process: "The compound shall be applied in a thin layer from bottle tip, or brush, in a manner which generates as little foam as possible. Containers are not to be reused. When emptied, containers shall be destroyed."

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 contract or order, the supplier may use his own or any other facilities suitable for the performance of 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 Preproduction Inspection. Preproduction inspection shall consist of performing all the examinations and tests specified herein.

4.2.1. Test Report. A preproduction inspection report shall be prepared in accordance with MIL-STD-831. The report shall include the composition and formulation of the preproduction samples inspected by the supplier. Supplier shall use the same ingredients and manufacturing processes for production material as for approved preproduction samples. If necessary to make any change in composition or processing which could affect any characteristics of compound, supplier shall obtain written approval from the procuring activity prior to incorporating any such change. Three copies of the report shall be forwarded as specified in the contract or order (see 6.2). The Government reserves the right to reject compounds which on the basis of their formulation are considered unsatisfactory for Government use.

4.2.2 Preproduction Samples. Preproduction samples shall consist of a minimum of twelve bottles of each type of compound specified in the contract and shall be forwarded with the test report specified in 4.2.1 as instructed in the contract (see 6.2).

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4.3 Quality Conformance Inspections. Quality conformance inspections shall consist of performing the tests as specified in Table I. Sampling and acceptance or rejection shall be as specified in Table II in accordance with MIL-STD0195.

4.3.1 Inspection Lot. An inspection lot of the compound shall consist of all of the compound of one type made in one batch. The unit of sample shall be a minimum of twelve bottles of compound.

TABLE I

QUALITY CONFORMANCE INSPECTION, SAMPLE SIZE, AND ACCEPTANCE CRITERIA

INSPECTION	SAMPLE SIZE OR INSPECTION	ACCEPTANCE CRITERIA
PH VALVE (4.4.2)	4	ACCEPTANCE NUMBER - ZERO REJECTION NUMBER - ONE
NONFLAMMABILITY (4.4.3)	4	ACCEPTANCE NUMBER - ZERO REJECTION NUMBER - ONE
RESIDUE (4.4.7)	4	ACCEPTANCE NUMBER - ZERO REJECTION NUMBER - ONE
MOLD GROWTH (4.4.10)	4	ACCEPTANCE NUMBER - ZERO REJECTION NUMBER - ONE
FOREIGN MATTER (4.4.11)	4	ACCEPTANCE NUMBER - ZERO REJECTION NUMBER - ONE
EXAMINATION OF PREPARATION FOR DELIVERY (4.5)	S-2	ACCEPTANCE QUALITY LEVEL 4.0 PERCENT DEFECTIVE

4.4 Quality Control Tests.

4.4.1 Odor. Odor shall be tested per ASTM D1292.

4.4.2 ph Value. The compound shall be tested with an electric pH meter that has been buffered with two buffer solutions in the desired pH range and is capable of measuring pH to 0.1 point.

4.4.3 Nonflammability. The nonflammability test will be tested per ASTM D92. No combustion below 100°C is allowed.

4.4.4 Leak Detection. Mount a laboratory screw hose clamp so that when the end of a rubber or plastic tube of 0.3175 cm is inserted, flush with the clamp jaws; that it will point upward at an angle of 45°. Attach the other end of the tube to a source of compressed oxygen gas provided with a suitable gauge. Apply a pressure of 34KPa and adjust the lead until, on application of the leak test compound, only slight foaming is observed. Immerse the leak in a shallow vessel containing the compound, and collect the escaping gas in an inverted glass tube marked in 0.1 cc divisions filled with the compound. Remove the leak from the bath and apply the leak detection compound. Immediate foaming shall be observed.

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Type I shall be tested with the bath at 21°C and 71°C.

Type II shall be tested with the bath at 51°C.

4.4.5 Foaming Ability. The compound shall be tested in accordance with ASTM Method D1173 with the temperature at 49°C.

4.4.6 Freezing Point. Type II only shall be tested per ASTM D1177.

4.4.7 Residue. Pipet 10 ml of the compound into a clean, dry 50 ml beaker preweighed to the nearest 0.1 mg. Reweigh the beaker plus compound and then heat the solution to approximately 95°C on a hot plate. Allow 8 ml of the solution to evaporate; then place the beaker with the remaining solution in an oven at 110 ± 2°C and dry to constant weight. The weight of the residue shall not exceed 0.50 percent of the weight of the original 10 ml of compound.

4.4.8 Corrosion.

4.4.8.1 Surfaces. Two (2) test panels 2.54 X 15.24 cm each, shall be made from each of the metals specified in Table II. Each test panel will be acetone-washed in an beaker and allowed to air dry for two hours in a desiccator. Each previously cleaned test panel shall be coated with a 0.1 ml of compound over 50 percent of the surface area and the panel dried under an infrared reflector drying lamp. The reflector apparatus shall be so adjusted that a 250-watt drying lamp shall be 15 cm above the test panel. After drying, the panel shall be removed and rinsed under a stream of cold deionized water. The panels shall rinse cleanly, leaving a bright shiny surface with no residue or film noticeable by a visual examination.

4.4.8.2 Between Faying Edges. Two cleaned test panels, 2.54 X 15.24 cm each, shall be clamped with a suitable clamp. 0.1 ml of the leak test compound shall be placed at the faying edge. After one minute, an additional 0.1 ml of the leak test compound shall be placed at the faying edge. The panels shall then be rinsed with cold deionized water and allowed to air dry for 2 hours at 25°C. Then the panels shall be separated and inspected for any evidence of corrosion at the faying surface. A second set of control panels shall be used in the same manner as the test panels except that no leak test compound will be applied. The test panels shall not have any greater degree of corrosion than the control panels test results.

TABLE II

METALS FOR CORROSION TEST

Metals	Surface
Aluminum Alloy (2024) conforming to QQ-A-250/5	--
Aluminum Alloy (2024) conforming to QQ-A-250/4	Anodized, in accordance with MIL-A-8625

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Steel conforming to MIL-S-7952	Cadmium plated in accordance with QQ-P-416
Copper conforming to QQ-C-576	Annealed

4.4.9 Compatability with Oxygen. Under ambient conditions, place 100 ml of the compound into two each 200 ml dewar flasks. Place a thermometer graduated in 0.1°C in each flask and record the temperature. Bubble a stream of oxygen from a glass tube through one of the solutions at 100 ± 10 ml per minute. Bubble a stream of air at the same rate through the other solution. Continue for 30 ± 2 minutes. Observe any temperature rise. The leak detection compound through which the oxygen was bubbled shall not show any steady or sudden rise in temperature and the final temperature shall not exceed by 0.5°C the final temperature of the compound through which the air was bubbled.

4.4.10 Mold Growth. The unit of sample shall be two bottles of compound. Supplier shall certify to the procuring activity the mold retardant used in its formulation as to its nomenclature, effect in an industrial environment and non detrimental effect on compounds intended use. It will be tested as specified in 4.4.10.1 through 4.4.10.6.

4.4.10.1 Preparation of mineral salts solution.

a. Using clean apparatus, prepare a mineral salts solution to contain the following:

(1)	Potassium dihydrogen orthophosphate (KH_2PO_4)	0.7g
(2)	Potassium monohydrogen orthophosphate (K_2HPO_4)	0.7g
(3)	Magnesium sulphate heptahydrate ($MgSO_4.7\ H_2O$)	0.7g
(4)	Ammonium nitrate (NH_4NO_3)	1.0g
(5)	Sodium chloride (NaCR)	0.005g
(6)	Ferrous sulfate heptahydrate ($FeSO4.7\ H_2O$)	0.002g
(7)	Zinc sulfate heptahydrate ($ZnSO_4.7\ H_2O$)	0.002g
(8)	Manganous sulfate monohydrate ($MnsO_4.\ H_2O$)	0.001g
(9)	Distilled water	1000ml

b. Measure the pH of the mineral salts solution. If not between 6.0 and 6.5, discard and prepare a proper solution.

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4.4.10.2 Preparation of mixed spore suspension. PRECAUTIONS: Although the fungi specified for this test are not normally considered to present a serious hazard to humans, certain people may develop allergies or other reactions. It is therefore recommended that standard operation procedures (SOPs) for safety be employed. It is also recommended that the tests be conducted by personnel trained in microbiological techniques.

a. Using asceptic techniques, prepare the spore suspension containing the following test fungi:

		FUNGUS SOURCE IDENTIFICATION NO.	
	FUNGI (See 6.3)	USDA	ATCC
(1)	Aspergillus niger	QM 386	ATCC 9642
(2)	Aspergillus flavus	QM 380	ATCC 9643
(3)	Aspergillus versicolor	QM 432	ATCC 11730
(4)	Penicillium funiculosum	QM 474	ATCC 11797
(5)	Chaetomium globosum	QM 459	ATCC 6205

b. Maintain pure cultures of these fungi separately on an appropriate medium such as potato dextrose agar except that chaetomium globosum shall be cultured on strips of filter paper overlayed on the surface of mineral salts agar.

c. Prepare mineral salts agar by dissolving 15.0g agar in a liter of the mineral salts solution described in 4.4.10.1. Do not keep the stock cultures for more than 4 months at $6^{o} \pm 4^{o}C$; after that time, prepare sub-cultures and use them for the new stocks.

d. Verify the purity of fungus cultures prior to the test.

e. Incubate subcultures used for preparing new stock cultures or the spore suspension at $30^{o} \pm 1.4^{o}C$ for 14 to 21 days.

f. Prepare a spore suspension of each of the five fungi by pouring into one subculture of each fungus 10 ml of an aqueous solution containing 0.05g per liter of a nontoxic wetting agent such as sodium dioctyl sulfosuccinate or sodium lauryl sulfate.

g. Use a rounded glass rod to gently scrape the surface growth from the culture of the test organism.

h. Pour the spore charge into a 125 ml capped Erlenmeyer flask containing 45 ml of water and 50 to 75 solid glass beads, 5mm in diameter.

i. Shake the flask vigorously to liberate the spores from the fruiting bodies and to break the spore clumps.

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j. Filter the dispersed fungal spore suspension into a flask through a 6 mm layer of glass wool contained in a glass funnel. This process should remove large mycelial fragments and clumps of agar.

k. Centrifuge the filtered spore suspension and discard the supernatant liquid.

l. Resuspend the residue in 50 ml of water and centrifuge. Wash the spores obtained from each of the fungi in this manner three times.

m. Dilute the final washed residue with mineral-salts solution in such a manner that the resultant spore suspension shall contain 1,000,000 ± 200,000 spores per ml as determined with a counting chamber.

n. Repeat this operation for each organism used in the test.

o. Perform a viability check for each organism in accordance with 4.4.10.3a.

p. Blend equal volumes of the resultant spore suspension to obtain the final mixed spore suspension. The spore suspension may be prepared fresh. If not freshly prepared, it should be held at 6 ± 4°C for not more than 7 days.

4.4.10.3 Control items. Two types of control tests are required. Using procedure of 4.4.10.3a verify the viability of the spore suspension and its preparation. Using the procedure of 4.4.10.3b verify the suitability of the chamber environment.

a. Viability of spore suspension.

(1) Prior to preparing the composite spore suspension inoculate sterile potato dextros agar plates with 0.2 to 0.3 milliliters of the spore suspension of each of the individual fungal species using separate potato dextrose agar plates for each species.

(2) Distribute the inoculum over the entire surface of the plate.

(3) Incubate the inoculated potato dextrose agar plate at 24° to 31°C for 7 days.

(4) After the incubation period, check the fungal growth. The absense of copious growth of any of the test organisms over the entire surface in each container will invalidate the results of any tests using these spores.

b. Test chamber environment.

(1) Inoculate a known susceptible substrate along with the test sample to insure that proper conditions are present in the incubation chamber to promote fungal growth. The controlled substrate shall consist of cotton fabric strips conforming to MIL-T-43566A Tape, Textile, Cotton, General Purpose, Natural or in Colors, Type Ia, Class 2, bleached, white flat construction.

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(2) Prepare the following solution:

(a) 10.0 grams glycerol

(b) 0.1 potassium dihydrogen orthophosphate (KH_2PO_4)

(c) 0.1g ammonium nitrate (NH_4NO_3)

(d) 0.025g magnesium sulfate ($MgSO_4.7\ H_2$)

(e) 0.05g yeast extract

(f) Distilled water to a total volume of 100 ml

(g) HCl or NaOH to adjust the final solution pH to 5.3.

(3) Dip the cotton strips into the above solution. After dipping, remove the excess liquid from the strips and hand them to dry before placing them in the chamber and inoculating them.

(4) Within the chamber, place the strips vertically in close proximity to and bracketing the test item so that the test strips and test items experience the same test environment. The length of the strips shall be at least the height of the test item.

4.4.10.4 Test Performance

4.4.10.4.1 Preparation for incubation.

a. Assure that the condition of the leak detection compound subjected to testing is similar to that as delivered by the manufacturer or customer for use, or as otherwise specified.

b. Place the compound in a 250 ml beaker in the chamber or cabinet on suitable fixtures.

c. Hold the test compound in the operating chamber for at least 4 hours immediately prior to inoculation.

d. Inoculate the test compound and cotton fabric chamber control items with the mixed fungal spore suspension by spraying it on the control and on and into the test sample in the form of a fine mist from an atomizer or nebulizer. Care should be taken to cover all external and internal surfaces which are exposed during use or maintenance.

e. Replace covers of the test items loosely.

f. Start incubation immediately following the inoculation.

4.4.10.5 Incubation of the test compound.

a. Incubate the test sample under a daily cycle of temperature and humidity conditions consisting of 20 hours of a relative humidity of 95 $\pm$ 5 percent at an air temperature of 30 $\pm$ 1°C followed by a 4-hour period in

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which conditions of 95^{+5}_{0} percent relative humidity at 25^{o}+ 1^{o}C are maintained 2 hours of the 4-hour period will be used for the transition(s) of temperature and relative humidity. Temperature and humidity conditions during the transition periods must be as follows: temperature 24^{o} to 21^{o}C and relative humidity above 90 percent.

b. Repeat the 24-hour daily cycle for the test duration.

c. After 7 days, inspect the growth on the control cotton strips to assure that the environmental conditions in the chamber are suitable for growth. For this assurance, at least 90 percent of the part of the surface area of each test strip located at the level of the test item should be covered by fungi when inspected visually. If not, repeat the entire test with the required adjustments of the chamber to produce conditions suitable for growth. Leave the control strips in the chamber for the duration of the test; note their condition at this time and record it.

d. If the cotton strips show satisfactory fungus growth after 7 days, continue the test for 72 hours from the time of inoculation. If there is a decrease in fungal growth on the cotton strips at the end of the test as compared to the 7-day results, the test is invalid.

4.4.10.6 Inspection. At the end of the incubation period, inspect the test samples immediately. If possible, inspect the samples within the chamber. If the inspection is conducted outside of the chamber and not completed in 8 hours, return the test samples to the test chamber or similar humid environment for a minimum of 12 hours. No mold growth on the leak detection compound shall be viewed on the test samples. If any mold growth is seen then the lot will be immediately rejected.

4.4.11 Foreign Matter. The unit of sample shall be one bottle. The compound shall be examined visually to determine if it is clear and free from suspended matter and sediment. The presence of any foreign matter or turbidity shall be cause for rejection.

4.5 Examination of Preparation for Delivery. The shipping containers and contents shall be examined to determine if the preservation, packaging, packing, and marking conform to the levels specified in the contract or order and for the existence of defects listed in Table III.

TABLE III

LIST OF DEFECTS FOR PREPARATION FOR DELIVERY

Item	Defects
Exterior and interior markings	Missing, incorrect, incomplete, illegible; of improper size, location, sequence, or method of application; markings not the same on the interior and exterior containers.

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Packaging and packing materials	Any nonconforming component; any component missing, damage, or otherwise defective.
Exterior and interior weight and content	Bottle do not contain specified number of ounces. Number of bottles per immediate container is more or less than specified. Gross or net weight of shipping container exceeds the requirements.
Workmanship	Inadequate application of the components such as incomplete closure of the unit package, intermediate package, container flaps, etc.; bulging or distortion of the containers.

5. PREPARATION FOR DELIVERY.

5.1 Packaging. Packaging shall be level A or Industrial as specified (see 6.2).

5.1.1 Level A.

5.1.1.1 100 ml and 250 ml Containers. Leak detection compound shall be furnished for 100 ml and 250 ml quantity sizes in containers as specified in 3.12 and 3.13 (see 6.2).

5.1.1.2 Four liter Containers. Four liters of leak detection compound shall be packaged in the rectangular plastic container with tamper proof seal and screw cap of PPP-C-569, normally used in commercial activity and composed of material that will not affect nor be affected by the contents.

5.1.1.3 Two hundred and five liter Containers. Two hundred and five liters of leak detection compound shall be packaged in drums conforming to size 4 of MIL-D-43703.

5.1.2 Industrial. Containers shall be packaged in accordance with MIL-STD-1188.

5.2 Packing. Packing shall be level A, B, or Industrial, as specified (see 6.2).

5.2.1 Level A.

5.2.1.1 100 ml and 250 ml Containers. Bottles containing 100 mls of leak detection compound shall be packed 48 to a fiberboard container conforming to Type CF Class - Weather Resistant, Variety SW, Grade V3c of PPP-B-636. The bottles shall be separated by full height partitions of the same material used to fabricate the box. Bottles containing 250 mls of leak detection compound shall be packed 24 to a fiberboard container conforming to Type CF, Class - Weather Resistant, Variety SW, Grade V3c of PPP-B-636. The bottles shall be separated by full height partitions of the same material used to fabricate the box.

5.2.1.2 Four liter Containers. Four liter containers shall be packed in a snug fitting fiberboard box conforming to Type CF, Class - Weather Resistant,

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Variety SW, Grade V3c of PPP-B-636. Each container shall be fitted with full height partitions of the same material as used in the construction of the box. Full height liners and top and bottom fiberboard pads shall be used.

5.2.1.3 Two hundred and five liter Containers. These containers shall require no further packing.

5.2.2 Level B. Quantities of 100 ml, 250 ml and 4 liters shall be packed in a manner similar to that described in 5.2.1, except that containers and full height partitions shall conform to Class - Domestic, Variety SW, Grade 175 of PPP-B-636. Quantities of 205 liters are not affected.

5.2.3 Industrial. Quantities of leak detection compound as specified in 5.1 shall be packed in accordance with MIL-STD-1188 except that quantities of 205 liters are not affected.

5.3. Shipping markings. Markings shall be make in accordance with MIL-STD-129.

5.4 Palletization. When required, containers will be palletized in accordance with MIL-STD-147 (see 6.2).

6. NOTES

6.1 Intended Use. The leak detection compound is intended for use in detecting leaks in both high-and low-pressure oxygen systems in aircraft and other related oxygen systems.

6.2 Ordering Data. Procurement documents should specify:

a. Title, number and date of this specification.

b. Size container required as applicable.

c. Type of compound desired (see 1.1).

d. The activity responsible for preproduction inspection, if other than the supplier, as specified in 4.1, and instructions concerning the submittal of preproduction samples and preproduction tests reports (see 4.2.1 and 4.2.2).

e. Level packaging and packing required (see 5.2 and 5.3)

f. Palletization when required (see 5.5).

6.3. Material Safety Data Sheets. Contractor shall furnish a material safety data sheet to the procuring activity or as directed in FED-STD-313.

6.4. Fungi. Fungi is available for the following two sources. The fungi may be distributed in a lyophilized state, or on agar slants (see 4.4.10.2).

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a. U. S. Department of Agriculture (SEA/FR)
Northern Regional Research Center
ARS Culture Collection
1815 N. University Street
Peoria, Illinois 60604

b. American Type Culture Collection
12301 Parklawn Drive
Rockville, Maryland 20852

CUSTODIANS:

ARMY - AV

NAVY - AS

AIR FORCE - 68

REVIEW ACTIVITIES:

ARMY - EA, MI

AIR FORCE - 11

DLA - GS

PREPARING ACTIVITY:

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PROJECT NO. 6850-0728

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STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions – Reverse Side)

1. DOCUMENT NUMBER	2. DOCUMENT TITLE

3a. NAME OF SUBMITTING ORGANIZATION	4. TYPE OF ORGANIZATION *(Mark one)*
	☐ VENDOR
b. ADDRESS *(Street, City, State, ZIP Code)*	☐ USER
	☐ MANUFACTURER
	☐ OTHER *(Specify)*: _____

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

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)*

DD FORM 82 MAR 1426

PREVIOUS EDITION IS OBSOLETE.