AEROSPACE MATERIAL SPECIFICATION

AMS1375™	REV. B

Issued 1978-01
Revised 1994-01
Reaffirmed 2021-07

Superseding AMS1375A

Remover, Paint
Epoxy and Polyurethane Paint Systems

RATIONALE

AMS1375B has been reaffirmed to comply with the SAE five-year review policy.

1. SCOPE:

1.1 Form:

This specification covers an alkaline-type, thickened paint remover in the form of a liquid.

1.2 Application:

Primarily for removing epoxy primer with epoxy polyamide or linear polyurethane paint topcoat from aluminum alloys and magnesium alloys.

1.3 Precautions:

1.3.1 Paint remover covered by this specification contains ingredients harmful to skin and eyes; therefore, use goggle-type eyeglasses and rubber gloves, apron, and rubber boots when handling this product.

1.3.2 Avoid contact of this paint remover with rubber, resin laminates, asphaltic-base floors, and walkways of aircraft. Avoid use in enclosed and unventilated areas.

1.4 Safety - Hazardous Materials:

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

TO PLACE A DOCUMENT ORDER: **Tel: 877-606-7323 (inside USA and Canada)**
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
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SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AMS1375B/

2. APPLICABLE DOCUMENTS:

The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order.

2.1 SAE Publications:

Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

AMS 2400	Cadmium Plating
AMS 2470	Anodic Treatment of Aluminum Alloys, Chromic Acid Process
AMS 2473	Chemical Treatment for Aluminum Alloys, General Purpose Coating
AMS 2475	Protective Treatments, Magnesium Alloys
AMS 2825	Material Safety Data Sheets
AMS 4037	Aluminum Alloy Sheet and Plate, 4.4Cu - 1.5Mg - 0.60Mn (2024; -T3 Flat Sheet, -T351 Plate), Solution Heat Treated
AMS 4041	Aluminum Alloy Sheet and Plate, Alclad, 4.4Cu - 1.5Mg - 0.60Mn (Alclad 2024 and 1-1/2% Alclad 2024-T3 Flat Sheet; 1-1/2% Alclad 2024-T351 Plate)
AMS 4045	Aluminum Alloy Sheet and Plate, 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr (7075; -T6 Sheet, -T651 Plate), Solution and Precipitation Heat Treated
AMS 4049	Aluminum Alloy Sheet and Plate, Alclad, 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr (Alclad 7075; -T6 Sheet, -T651 Plate), Solution and Precipitation Heat Treated
AMS 4377	Magnesium Alloy Sheet and Plate, 3.0A1 - 1.0Zn (AZ31B-H24), Cold Rolled, Partially Annealed
AMS 4911	Titanium Alloy Sheet, Strip, and Plate, 6A1 - 4V, Annealed
AMS 5045	Steel Sheet and Strip, 0.25 Carbon, maximum, Hard Temper
AMS 6350	Steel Sheet, Strip, and Plate, 0.95Cr - 0.20Mo (0.28 - 0.33C) (SAE 4130)

2.2 ASTM Publications:

Available from ASTM, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

ASTM D 1193	Reagent Water
ASTM F 483	Total Immersion Corrosion Test for Aircraft Maintenance Chemicals
ASTM F 519	Mechanical Hydrogen Embrittlement Testing of Plating Processes and Aircraft Maintenance Chemicals
ASTM F 1080	Determining the Consistency of Viscous Liquids Using a Consistometer
ASTM F 1110	Sandwich Corrosion Test
ASTM F 1111	Corrosion of Low Embrittling Cadmium Plate by Aircraft Maintenance Chemicals

2.3 U.S. Government Publications:

Available from DODSSP, Subscription Services Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

2.3.1 Federal Specifications:

VV-W-95	Wax, Paraffin, Technical
PPP-D-729	Drum, Shipping and Storage, Steel, 55 Gallon, (208 Liters)
PPP-P-704	Pails, Metal Shipping, Steel, (1 through 12 Gallons)
PPP-P-1892	Paint, Varnish, Lacquer, and Related Materials, Packaging, Packing, and Marking of

2.3.2 Federal Standards:

FED-STD-141	Paint, Varnish, Lacquer and Related Materials, Methods of Inspection, Sampling and Testing
FED-STD-595	Color (Requirements for Individual Color Chips)

2.3.3 Military Specifications:

MIL-D-6998	Dichloromethane, Technical
MIL-A-9962	Abrasive Mats, Non-Woven, Non-Metallic
MIL-C-22750	Coating, Epoxy Polyamide
MIL-P-23377	Primer Coating, Epoxy Polyamide, Chemical and Solvent Resistant
MIL-T-23397	Tape, Pressure-Sensitive Adhesive, for Masking During Paint Stripping Operations
MIL-C-81706	Chemical Conversion Materials for Coating Aluminum and Aluminum Alloys
MIL-C-83286	Coating, Urethane, Aliphatic Isocyanate, for Aerospace Applications

2.3.4 Military Standards:

MIL-STD-105	Sampling Procedures and Tables for Inspection by Attributes
MS 24694	Screw, Machine, Flat Countersunk Head, 100 Deg, Structured, Cross Recessed

2.3.5 USAF ANA Standards:

AN 315	Nut, Plain, Airframe
AN 960	Washer, Flat

3. TECHNICAL REQUIREMENTS:

3.1 Material:

Shall be a thixotropic paint remover consisting of organic solvents, evaporation retarders, wetting agents, and other ingredients required to provide a product meeting the requirements of 3.2.

3.2 Properties:

(R)

The paint remover shall conform to the following requirements; tests shall be performed on the as-supplied product in accordance with specified test methods; all tests shall be conducted at 24 °C ± 3 (75 °F + 5) and at a relative humidity of 50% + 5, unless otherwise specified herein:

3.2.1 Toxicity: The product shall be free from chemicals and solvents in the compounded mixture which may prove dangerously corrosive or may produce vapors in such concentration as to become a medical hazard to personnel when used for its intended purpose in accordance with manufacturer's recommendations. (See 1.4)

3.2.2 Consistency: The paint remover shall flow to a point between 18 and 23 cm in 5 minutes, determined in accordance with ASTM F 1080. The remover shall be of such consistency that a smooth, even coating can be applied by brushing, flowing, or spraying onto, and will adhere to, the vertical surface of test panels and painted surfaces of aircraft for sufficient time for the paint remover to be effective.

3.2.3 Flammability: The paint remover shall not continue to burn longer than 3 seconds after removal of the flame, determined in accordance with 4.5.1.

3.2.4 Corrosion of Metal Surfaces:

3.2.4.1 (R) Sandwich Corrosion: Specimens, after test, shall show a rating not worse than 1, determined in accordance with ASTM F 1110.

3.2.4.2 Total Immersion Corrosion: The product shall neither show evidence of pitting of the panels nor cause a weight change of any test panel greater than the following, determined in accordance with ASTM F 483:

Test Panel	Weight Change mg/cm^2 per 24 hours
(R) AMS 4037 Aluminum Alloy, anodized as in AMS 2470	0.3
AMS 4041 Aluminum Alloy	0.3
AMS 4045 Aluminum Alloy, anodized as in AMS 2470	0.3
AMS 4049 Aluminum Alloy	0.3
AMS 4377 Magnesium Alloy, dichromate treated as in AMS 2475	0.2
AMS 4911 Titanium Alloy	0.1
AMS 5045 Carbon Steel, polished to a surface finish of 65 microinches (1.7 mm) or better	0.8

3.2.4.3 (R) Low-Embrittling Cadmium Plate: Panels coated with low-embrittling cadmium plate shall not show a weight change greater than 0.3/mg/cm2 per 24 hours, determined in accordance with ASTM F 1111.

3.2.4.4 Dissimilar Metal Corrosion: There shall be no significant discoloration or evidence of corrosion, determined in accordance with 4.5.2. Slight discoloration of cadmium plated low-alloy steel panels is permissible.

3.2.5 Hydrogen Embrittlement: The paint remover shall be nonembrittling, determined in accordance with ASTM F 519, Type 1a, 1c, or 2a.

3.2.6 Storage Stability:

3.2.6.1 Short-Term: The paint remover shall not cake, clot, gel, or separate after being stored at room temperature, undisturbed, for 6 days in a darkened area. The product, tested for stability in accordance with 4.5.3, shall neither polymerize or show significant changes in physical appearance nor exhibit evidence of adversely affecting steel surfaces. After being tested as in 4.5.3, the remover shall completely lift the finish from test panels, prepared and tested in accordance with 4.5.5, as well as, or better than, a sample of the original, unexposed paint remover.

3.2.6.2 Extended: Paint remover, stored as in 4.5.4, shall show no visible evidence of deterioration. It shall, after storage, meet all the technical requirements of this specification except that short-term storage stability need not be determined.

3.2.7 Paint Stripping Efficiency: The paint remover, tested in accordance with 4.5.5, shall remove not less than 90% of the paint from the exposed surface within 10 minutes at 24 °C ± 2 (75 °F ± 3) and within 20 minutes at 10 °C ± 1 (50 °F ± 2).

3.2.7.1 Relative Stripping Efficiency: Shall be equal to, or better than, that of the control formula of 4.5.5.2.1, measured as the time to produce equal percentages of stripping or as the percentage of panel area stripped in equal lengths of time.

3.2.8 Rinsability: The loosened paint and spent remover shall be easily removed by water rinsing, determined in accordance with 4.5.6. If residues or noticeable water breaks occur, they shall not adversely affect the drying or adhesion of an applied paint system.

3.2.9 Refinishing Properties of Stripped Surfaces: Following stripping and wiping clean, using cloths saturated with methyl ethyl ketone or other suitable solvent, the paint remover shall leave a surface suitable for refinishing, including re-surface treatment, determined in accordance with 4.5.7.

3.2.10 Volatility: Shall be no greater than the volatility of distilled water, determined in accordance with 4.5.8.

3.2.11 Performance: The paint remover, used in accordance with manufacturer's recommendations, shall show satisfactory paint stripping performance on actual paint schedules that have been in service. This performance test shall be determined after the product has met all other technical requirements of this specification.

3.3 Quality:

Paint remover, as received by purchaser, shall be homogeneous, uniform in consistency, suitable for spray, brush, or flow application, and free from skins and lumps and from foreign materials detrimental to usage of the paint remover.

4. QUALITY ASSURANCE PROVISIONS:

4.1 Responsibility for Inspection:
(R)

The vendor of the product shall supply all samples for vendor's tests and shall be responsible for performing all required tests. Purchaser reserves the right to sample and to perform any confirmatory testing deemed necessary to ensure that the product conforms to the requirements of this specification.

4.2 Classification of Tests:

4.2.1 Acceptance Tests: Tests for consistency (3.2.2), flammability (3.2.3), total immersion corrosion (anodized aluminum alloys only) (3.2.4.2), low-embrittling cadmium plate (3.2.4.3), short-term storage stability (3.2.6.1), paint stripping efficiency (3.2.7), rinsability (3.2.8), volatility (3.2.10), and quality (3.3) are acceptance tests and shall be performed on each lot.

4.2.2 (R) Periodic Tests: Tests for sandwich corrosion (3.2.4.1), total immersion corrosion of all alloys other than anodized aluminum (3.2.4.2), dissimilar metal corrosion (3.2.4.4), hydrogen embrittlement (3.2.5), refinishing properties of stripped surfaces (3.2.9), and performance (3.2.11) are periodic tests and shall be performed at a frequency selected by the vendor unless frequency of testing is specified by purchaser.

4.2.3 Preproduction Tests: Tests for all technical requirements are preproduction tests and shall be performed prior to or on the initial shipment of the product to a purchaser, when a change in ingredients and/or processing requires reapproval as in 4.4.2, and when purchaser deems confirmatory testing to be required.

4.2.3.1 For direct U.S. Military procurement, substantiating test data and, when requested, preproduction test material shall be submitted to the cognizant agency as directed by the procuring activity, contracting officer, or request for procurement.

4.3 (R) Sampling and Testing:

Shall be in accordance with the following; a lot shall be all paint remover manufactured at the same time from the same batches of raw materials and presented for vendor's inspection at one time. If paint remover cannot be identified by batch or tank, a lot shall consist of not more than 5,000 gallons (18,927 L) offered for delivery at one time.

4.3.1 Acceptance Tests:

4.3.1.1 Bulk Quantity: Samples shall be selected in accordance with FED-STD-141 except that the sample shall consist of not less than one gallon (3.8 L) of paint remover from each lot.

4.3.1.2 (R) Filled Containers: A random sample of filled containers shall be selected from each lot in accordance with MIL-STD-105 at Inspection Level I to verify conformance to all requirements of this specification regarding fill, closure, marking, and other requirements not involving tests.

4.3.2 Periodic Tests and Preproduction Tests: As agreed upon by purchaser and vendor.

4.4 Approval:

4.4.1 Paint remover shall be approved by purchaser before remover for production use is supplied, unless such approval be waived by purchaser. Results of tests on production remover shall be essentially equivalent to those on the approved sample.

4.4.2 Vendor shall use ingredients, manufacturing procedures, and methods of inspection on production remover which are essentially the same as those used on the approved sample remover. If necessary to make any change in ingredients or in manufacturing procedures, vendor shall submit for reapproval a statement of the proposed changes in ingredients and/or processing and, when requested, sample remover. Production paint remover made by the revised procedure shall not be shipped prior to receipt of reapproval.

4.5 Test Methods:

Shall be as follows:

4.5.1 Flammability:

4.5.1.1 Preparation of Test Panel: One end of a clean AMS 4037 aluminum alloy panel 0.040 x 3/4 x 4 inches (1.02 x 19 x 102 mm), anodized in accordance with AMS 2470, shall be held at an angle of approximately 45 degrees. The paint remover shall be poured along the upper edge of the panel allowing the remover to flow freely over the surface. Remover settling on the reverse side of panel shall be wiped clean before proceeding with the test.

4.5.1.2 Procedure: A micro-burner flame, 1/8 to 3/16 inch (3.2 to 4.8 mm) in height, shall be passed, within a 2-second period, back and forth along the lower edge of the panel. This operation shall be repeated three times at 3-second intervals. If the remover ignites, the burner flame shall be removed and observation made to ascertain whether the remover continues to burn. The above procedure shall be repeated on another similarly prepared panel except that it shall be placed in an oven for 15 minutes ± 1 at 45 °C ± 2 (113 °F ± 4), removed from the oven, and subjected to the flame test.

4.5.2 Dissimilar Metal Corrosion:

4.5.2.1 Preparation of Test Panels: Ten test panels, each approximately 4 x 3 inches (102 x 76 mm), shall be prepared from the following metals; panels shall be of any convenient thickness, 3/16 inch (4.8 mm) is suggested, except that the aluminum alloy panels shall have nominal thickness of 1/8 inch (3.2 mm).

Test Panel Material	Number of Panels
AMS 4049 Aluminum Alloy	3
AMS 4377 Magnesium Alloy, dichromate treated as in AMS 2475	2
AMS 4911 Titanium Alloy	3
AMS 6350 Low-Alloy Steel, cadmium plated as in AMS 2400	2

4.5.2.1.1 The three aluminum alloy, one steel, and one magnesium alloy test panels shall have holes drilled as shown in Figure 1. One magnesium alloy, one steel, and the three titanium alloy test panels shall have holes located as specified in Note 3 of Figure 1. The test panels shall be cleaned by immersion for not less than 60 seconds in boiling, reagent grade isopropanol, rinsed several times in methyl ethyl ketone, and dried. Dissimilar metal couples as follows shall be assembled as in Figure 2, using a shim of polyethylene 0.010 inch (0.25 mm) in nominal thickness under one corner, with cadmium plated steel screws, nuts, and washers turned finger-tight; in forming the couples, care shall be exercised to avoid making fingerprints on the test panels:

Aluminum Alloy to Magnesium Alloy
Aluminum Alloy to Cadmium Plated Steel
Aluminum Alloy to Titanium Alloy
Titanium Alloy to Cadmium Plated Steel
Titanium Alloy to Magnesium Alloy

4.5.2.2 Procedure: Immerse the coupled panels completely in the paint remover for 60 minutes ± 5. Remove the couples and place them in an oven, maintained at 38 °C ± 1 (100 °F ± 2), for not less than 48 hours. Remove the panels from the oven and immediately suspend them in a clean desiccator having the lower portion filled with distilled water; close the desiccator and maintain it at 25 °C ± 1 (77 °F ± 2), keeping it tightly sealed. After the 48 hours, remove the couples from the desiccator, disassemble them, wash each panel with water, and clean with acetone. Examine each panel for pitting, etching, and corrosion products.

4.5.3 Short-Term Storage Stability:

4.5.3.1 Preparation of Test Sample: A 5 ounce (148 mL) portion of well mixed paint remover shall be poured into each of two chemically clean 12 ounce (355 mL) pressure-resistant, clear, glass bottles and carefully capped. The bottles shall be approximately 9-1/2 inches (241 mm) in height, with shoulders 2-1/2 inches (63.5 mm) in outside diameter and 5 inches (127 mm) from the base.

4.5.3.2 Procedure:

4.5.3.2.1 Cold Cycle Test: One bottle shall be stored in a darkened area for not less than 6 days. The other bottle shall be placed in a water bath maintained at 54 °C + 2 (129 °F ± 4) for 60 minutes ± 2. The bottle in the water bath shall be carefully removed and allowed to cool at room temperature for 60 minutes ± 2 and examined visually. Layer formation is not acceptable and further testing shall be discontinued. If the paint remover appears homogeneous, the bottle shall be placed in a cold box maintained at -10 °C ± 2 (14 °F ± 4) for 60 minutes ± 2, after which it shall be removed and allowed to remain undisturbed, at room temperature, for 60 minutes ± 2. The paint remover shall again be examined for homogeneity. If layer formation is evident, further testing shall be discontinued. If the paint remover appears homogeneous, the contents of the bottle shall be carefully transferred (avoid splashing) to a similar, chemically-clean bottle for performing the hot cycle test of 4.5.3.2.2.

4.5.3.2.2 (R) Hot Cycle Test: A strip of AMS 5045 carbon steel, approximately 0.020 x 1/2 x 6 inches (0.51 x 12.7 x 152 mm), shall be polished with abrasive mat to remove surface contamination. The abrasive mat shall be a qualified product conforming to MIL-A-9962, fine or very-fine grade. The steel strip shall then be cleaned by being placed for not less than 1 minute in boiling, reagent grade isopropanol and rinsed several times in methyl ethyl ketone. The steel strip shall be partially immersed in the paint remover contained in the test bottle. In subsequent operations, the bottle shall be handled carefully to avoid sloshing paint remover farther up the steel strip. The bottle shall be capped, placed in an oil bath, and heated at a uniform rate to 60 °C ± 2 (140 °F ±4) within 5 hours. It shall be held at this temperature for not less than 3 hours. The above heating procedure shall be repeated each day for a total of 5 days. No heat shall be supplied to the bath overnight. This test need not necessarily be attended if an interval timer is used to operate the equipment automatically. On the morning of the sixth day, the bottle shall be removed from the bath, uncapped, and the steel strip carefully withdrawn without disturbing the paint remover. The strip shall be rinsed with tap water, dried, and the portion of the steel strip which has been immersed in the remover examined for evidence of pitting, corrosion, and uneven darkening. The part of the test strip above the paint remover shall be examined for evidence of corrosion. The paint remover shall be compared with the remover in the original bottle stored in a darkened area. Any difference in appearance, such as layer separation and evidence of polymerization, shall be noted. The opened bottle shall be recapped and the two bottles thoroughly shaken for 60 seconds ± 2, allowed to remain undisturbed for 60 minutes ± 2 at room temperature, and examined. Any marked variation in general appearance between the two samples shall be considered as showing unsatisfactory stability properties. If considered satisfactory, the paint remover, which had been heated as above, shall be tested for paint stripping efficiency.

4.5.4 (R) Extended Storage Stability: One gallon (3.8 L) of paint remover shall be stored in a glass bottle to which have been added six 1 x 6 inch (25 x 152 mm) clean, AMS 5045 carbon steel strips having a surface roughness of 65 microinches (1.65 mm) or better. The bottle shall be protected from light and stored for 1 year at 24 °C ± 3 (75 °F ± 5). After storage, the paint remover shall be subjected to all other property tests (3.2) of this specification except the short-term stability test and the performance test.

4.5.5 Paint Stripping Efficiency:

4.5.5.1 Preparation of Test Panels: Test panels shall be made from AMS 4041 aluminum alloy and shall be nominally 0.020 x 3 x 6 inches (0.51 x 76 x 152 mm) in size. Panels double in area may be used by dividing panels into two areas with MIL-T-23397 foil masking tape. If double size panels are used, the masking tape should be sufficiently resistant to the paint remover to remain on the panels during the test. The edges of the panels shall be broken and smoothed and the panels prepared as follows:

Step 1	Chemical treat in accordance with AMS 2473 using MIL-C-81706 or equivalent.
Step 2	One coat of MIL-P-23377 epoxy polyamide primer to a thickness of 0.6 to 0.9 mil (15 to 23 mm); dry for 2 to 4 hours at room temperature.
Step 3a	One mist coat of MIL-C-22750 epoxy polyamide (FED-STD-595 Gloss White); dry for 30 minutes + 5 at room temperature.
Step 3b	One mist coat of MIL-C-83286 aliphatic isocyanate urethane (FED-STD-595 Gloss White); dry for 30 minutes + 5 at room temperature.
Step 4a	One full coat of MIL-C-22750 epoxy polyamide (FED-STD-595 Gloss White) to a thickness of 1.2 to 1.4 mil (30 to 36 mm); dry for 4 days at room temperature, and bake for 24 hours ± 0.5 at 82 °C ± 3 (180 °F ± 5).
Step 4b	One full coat of MIL-C-83286 aliphatic isocyanate urethane (FED-STD-595 Gloss White) to a thickness of 1.2 to 1.4 mil (30 to 36 mm); dry for 4 days at room temperature and bake for 24 hours ± 0.5 at 82 °C ± 3 (180 °F ± 5).

4.5.5.1.1 For testing material for removal of epoxy polyamide paint system, prepare panels using steps 1, 2, 3a, and 4a.

4.5.5.1.2 For testing material for removal of aliphatic isocyanate urethane paint systems, prepare panels using steps 1, 2, 3b, and 4b.

4.5.5.2 Procedure: Six panels, or 3 panels double in area, coated with each paint system specified in 4.5.5.1.1 or 4.5.5.1.2 shall be placed on a rack so that the 6-inch (152-mm) dimension forms an approximate 60 degree angle with the horizontal. The test shall be performed in a well-ventilated, draft-free room. The test sample shall be poured along the top edge of three panels to completely cover each panel area, taking 15 seconds ± 1 for each wetting procedure. On the other three panel areas, a similar procedure shall be followed using freshly-prepared, well-mixed, control formula as in 4.5.5.2.1. Note the time at which application is started and time when lifting or wrinkling of the coating is completed. After 10 minutes ± 0.2 exposure, the loosened film shall be brushed off and the panel rinsed, with brushing, under a stream of cool water. The above procedure shall be repeated at 10 °C ± 1 (50 °F ± 2) with two fresh panels, one each for the test material and the comparison control formula, and an exposure time of 20 minutes ± 0.2 before rinsing. The panels and removers shall be at 10 °C ± 1 (50 °F ± 2) before starting the test. Times shall be recorded as above and compared for compliance with requirements of 3.2.7. Observation shall be made to determine if coating has been removed by test sample more completely than by comparison control formula. Retain panels for rinsability test of 4.5.6.

4.5.5.2.1 Paint Stripping Comparison Control Formula: Shall be prepared as follows; the comparison control formula does not conform to all requirements of this specification and is intended to be used only as a means of standardization in order that certain desired properties may be obtained:

MIL-D-6998 Dichloromethane	120 mL
Phenol 89% U.S.P.	70 mL
ASTM D 1193, Type IV Water	10 mL
Tetrasodium N- (1, 2-dicarboxyethyl)-N-octadecysulfosiccinamate	4 grams
Tall Oil Fatty Acid	8 grams
Dioctyl ester of sodium sulfosuccinic acid (75%)	4 grams
Hydroxypropyl cellulose	2 grams
VV-W-95 Paraffin Wax	2 grams
MIL-D-6998 Dichloromethane	80 mL

Mix dichloromethane, phenol, distilled water, tetrasodium N- (1, 2-dicarboxyethyl)-N-octadecysulfosiccinamate, tall oil fatty acid dioctyl ester of sodium sulfosuccinic acid (75%), in the order named, with constant stirring. Add hydroxypropyl cellulose very slowly with continued stirring. Melt the paraffin wax, melting point 53 to 54 °C (127 to 129 °F), and slowly add 80 mL dichloromethane to the melted wax. Slowly add the wax-dichloromethane mixture to the initial mixture while continuing stirring. Adjust the pH of the mixture to 8.5 by addition of 28% ammonium hydroxide diluted 1:1 with ASTM D 1193, Type IV, water.

4.5.6 Rinsability: The panels used in the test of 4.5.5 shall be recoated with paint remover and placed in a draft-free location for not less than 45 minutes. After the 45 minutes, any remaining paint film shall be loosened from the surface. The panels shall be rinsed with tap water for 5 minutes ± 0.5 while brushing with a soft-bristle brush. Rate of flow of water shall be 4 gallons (15 L) per minute. The panels shall be examined for removal of the spent remover, residue, and water break. The panels shall be oven dried for 15 minutes ± 1 at 70 °C ± 5 (158 °F ± 9), allowed to cool to room temperature, and examined for residue. Note if appreciable water break and residues occur.

4.5.6.1 Smut: After stripping the paint as specified in 4.5.5 and 4.5.6, if any residue or smut is present on the panels, the surfaces of the panels shall be wiped clean using cloths saturated with methyl ethyl ketone or other suitable solvent.

4.5.7 Refinishing Properties of Stripped Surfaces: The panels from 4.5.6.1 shall be refinished in accordance with 4.5.5.1 and the refinished surfaces examined for evidence of tackiness. A tack-free film is defined in FED-STD-141, Method 4061. The adhesion of the finish shall be determined in accordance with FED-STD-141, Method 6301, and compared with the adhesion of the finish on a new panel coated at the same time. The surface shall be acceptable if refinishing produces a tack-free film with undiminished adhesion.

4.5.8 Volatility: Bring sample and ASTM D 1193, Type IV, water to test temperature. A Petri dish, 90 mm in diameter and 15 mm deep, shall be placed on each pan of a two-pan beam balance. Sufficient paint remover shall be added to cover the bottom of one of the dishes. ASTM D 1193, type IV, water shall be carefully poured into the other dish until the dish containing the paint remover is counterbalanced. The balance with the Petri dishes on the pans shall be exposed for 30 minutes ± 1 in a draft-free location. At the end of the exposure period, the comparative loss in weight shall be determined.

4.6 Reports:

The vendor of the paint remover shall furnish with each shipment a report showing the results of tests on each lot to determine conformance to the acceptance test requirements and, when performed, to the periodic test requirements and stating that the paint remover conforms to the other technical requirements. This report shall include the purchase order number, lot number, AMS 1375B, manufacturer's identification, and quantity.

4.6.1 A material safety data sheet conforming to AMS 2825, or equivalent, shall be supplied to each purchaser prior to, or concurrent with, the report of preproduction tests results or, if preproduction testing be waived by purchaser, concurrent with the first shipment of remover for production use. Each request for modification of remover formulation shall be accompanied by a revised data sheet for the proposed formulation.

4.7 Resampling and Retesting:

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If any sample used in the above tests fails to meet the specified requirements, disposition of the paint remover may be based on the results of testing three additional samples for each original nonconforming sample. Failure of any retest sample to meet the specified requirements shall be cause for rejection of the paint remover represented. Results of all tests shall be reported.

5. PREPARATION FOR DELIVERY:

5.1 Packaging and Identification:

5.1.1 Paint remover shall be packaged in containers of a type and size agreed upon by purchaser and vendor.

5.1.1.1 For direct U.S. Military procurement, the paint remover shall be packaged in containers conforming to Federal PPP-D-729, Federal PPP-P-704, or as ordered.

5.1.2 Each container of paint remover shall be legibly marked with not less than AMS 1375B, purchase order number, lot number, manufacturer's identification, and quantity.

5.1.3 Each unit package shall be marked with the date of manufacture and shall be clearly marked to warn of hazardous chemicals (See 1.4). The following information shall be included on the product labeling: