

MIL-T-6095B

29 October 1969

SUPERSEDING

MIL-T-6095A

14 August 1951

MILITARY SPECIFICATION

THINNER, CELLULOSE-NITRATE-DOPE, BLUSH-RETARDING

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

1. SCOPE

1.1 This specification covers the requirements for blush retarding thinner for use in thinning cellulose nitrate dopes and lacquers only.

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 this specification to the extent specified herein.

SPECIFICATIONS

Federal

TT-A-511	Amyl Acetate (For Use in Organic Coatings)
TT-B-838	Butyl, Acetate; Normal (For Use in Organic Coatings)
TT-B-846	Butyl Alcohol; Normal (For Use in Organic Coatings)
TT-N-97	Naphtha; Aromatic
PPP-D-729	Drums, Metal 55-Gallon (for Shipment of Non-corrosive Material)
PPP-P-704	Pails, Shipping, Steel (1 through 12 Gallon)

FSC 8010

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STANDARDS

Federal

Fed. Test Method **Paint, Varnish, Lacquer and Related Materials;**
Std. No. 141 **Methods of Inspection, Sampling and Testing**

Military

MIL-STD-105 **Sampling Procedures and Tables for Inspection by**
 Attributes

MIL-STD-129 **Marking for Shipment and Storage**

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

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

Consolidated Classification Committee

Consolidated Freight Classification Rules

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

3. REQUIREMENTS

3.1 **Materials** - Ingredient materials used in the manufacture of this product shall be of high quality, suitable for the purpose, and shall conform to applicable Government specifications as specified herein.

3.2 **Composition** - The composition shall conform to the percentages by weight given in Table I.

3.3 **Quantitative requirements** - The thinner shall meet the requirements specified in Table II.

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TABLE I
COMPOSITION

Ingredient	Percent by Weight
Butyl Acetate (TT-B-838)	39.2 - 40.8
Butyl Alcohol; Normal (TT-B-846)	24.5 - 25.5
Naphtha, Aromatic Type II (TT-N-97)	24.5 - 25.5
Amyl Acetate (TT-A-511)	9.8 - 10.2

TABLE II
QUANTITATIVE REQUIREMENTS

Characteristic	Requirements	
	Minimum	Maximum
Color, platinum-cobalt scale	----	10
Specific Gravity, 20°/20° C	0.843	0.859
Acidity percent by weight as acetic acid		0.03
Nonvolatile matter, mg per 100 ml.		10

3.4 Qualitative requirements -

3.4.1 Appearance - The appearance of the thinner shall be clear and free from suspended matter when examined by transmitted light.

3.4.2 Odor - The odor shall be mild and not noticeable after drying from filter paper.

3.4.3 Spot test - The thinner shall leave no oily spot or stain on filter paper.

3.4.4 Copper corrosion - The thinner shall not blacken or corrode clean metallic copper (Classification 4 of Method 5101.1 - Fed. Test Method Std. No. 141).

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

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inspection requirements as specified herein. Except as otherwise specified in the contract or order, the supplier may utilize 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 Sampling -

4.2.1 Lot - A lot shall consist of thinner produced by one manufacturer, with no change in process or materials, provided the operation is continuous. In the event the process is a batch process, each batch shall constitute a lot.

4.2.2 Sampling for inspection of filled containers - A random sample of filled containers shall be selected from each lot offered for inspection in accordance with MIL-STD-105 at Inspection Level I, and Acceptable Quality Level (AQL) = 2.5 percent defective to verify compliance with this specification regarding fill, closure, marking and other requirements not involving tests.

4.2.3 Sampling for tests - Two containers shall be selected at random from each inspection lot. If more than one lot is represented in the shipment, each lot represented shall be treated as a separate shipment for sampling purposes. The contents of each container having been selected at random for sampling, shall be thoroughly mixed by rolling and inverting immediately prior to sampling. Each sample shall be tested to determine compliance with this specification.

4.3 Quality assurance inspection -

4.3.1 Inspection of filled containers - Each sample filled container selected in accordance with 4.2.2 shall be examined for defects of the container and the closure, for evidence of leakage, and for unsatisfactory marking; each sample filled container shall also be weighed to determine the amount of contents. Any container in the sample, having one or more defects, or under required fill, shall be rejected and if the number of defective containers in any sample exceeds the acceptance number for the applicable sampling plan of MIL-STD-105, the lot represented by the sample shall be rejected.

4.3.2 Lot acceptance tests - The samples selected in accordance with 4.2.3 shall be subjected separately to the tests specified in 4.4. If either sample fails one or more of these tests, the lot shall be rejected.

4.4 Test procedures -

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4.4.1 The following tests shall be conducted in accordance with Fed. Test Method Std. No. 141.

Test	Method No.
Color	4243.1
Specific gravity	4183
Acidity	5252
Nonvolatile	4045
Appearance	4261
Odor	4401
Spot test	4491
Copper corrosion	5101.1

4.4.2 Composition - The component content of the thinner shall be determined by fractional distillation or any other reliable method.

5. PREPARATION FOR DELIVERY

5.1 Packaging -

5.1.1 Level A - Unless otherwise specified, the thinner shall be furnished in 5-gallon containers conforming to Class 1 of PPP-P-704, or in 55-gallon drums conforming to PPP-D-729. The type and size of containers shall be specified by the procuring activity.

5.1.2 Level C - Unless otherwise specified, packaging shall be in accordance with the manufacturer's commercial practice.

5.2 Packing -

5.2.1 Levels A and B - Thinner packaged in accordance with 5.1.1 will require no overpacking.

5.2.2 Level C - Thinner packaged in accordance with 5.1.2 shall be packed to afford protection against damage during direct shipment from the supply source to the first receiving activity for immediate use. Containers shall comply with Consolidated Freight Classification Rules or other common carrier regulations applicable to the mode of transportation.

5.3 Marking - Containers shall be marked in accordance with MIL-STD-129. The shipment marking nomenclature shall be: Thinner, Cellulose Nitrate Dope, Blush Retarding.

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5.3.1 Additional marking - Each container shall be marked with the following use instructions:

Directions: Use only if required to eliminate blushing of Cellulose Nitrate Dopes and Lacquers

6. NOTES

6.1 Intended use - The thinner covered by this specification is intended for use as a blush-retarding thinner for cellulose-nitrate dopes and lacquers only.

6.2 Ordering data - Procurement documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Quantity of thinner desired.
- (c) Type and size of containers (see 5.1).
- (d) Selection of applicable levels of preservation, packaging and packing (see Section 5).

6.3 Basis of purchase - The thinner should be purchased by volume, the unit being a U. S. gallon of 231 cubic inches at 20° C (68° F). The volume of deliveries may be determined by dividing the net weight, in pounds, by the weight per gallon. To obtain the weight per gallon, multiply the specific gravity at 20°/20° C by 8.322. One gallon of thinner at 20° C (68° F) weighs between 7.01 and 7.15 pounds.

Custodians:

Army - MR
Navy - AS
Air Force - 84

Preparing activity:

Navy - AS
Project No. 8010-0683

Review activities:

Army - MR
Navy - AS
Air Force - 84

User interest:

Army - AV

Civil Agency Interest:

Interested activity:
GSA-FSS

SPECIFICATION ANALYSIS SHEET		Form Approved Budget Bureau No. 119-R004
INSTRUCTIONS		
This sheet is to be filled out by personnel either Government or contractor, involved in the use of the specification in procurement of products for ultimate use by the Department of Defense. This sheet is provided for obtaining information on the use of this specification which will insure that suitable products can be procured with a minimum amount of delay and at the least cost. Comments and the return of this form will be appreciated. Fold on lines on reverse side, staple in corner, and send to preparing activity (as indicated on reverse hereof).		
SPECIFICATION		
MIL-T-6095B THINNER, CELLULOSE-NITRATE-DOPE, BLUSH-RETARDING		
ORGANIZATION (Of submitter)	CITY AND STATE	
CONTRACT NO.	QUANTITY OF ITEMS PROCURED	DOLLAR AMOUNT
MATERIAL PROCURED UNDER A		
<input type="checkbox"/> DIRECT GOVERNMENT CONTRACT <input type="checkbox"/> SUBCONTRACT		
1. HAS ANY PART OF THE SPECIFICATION CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?		
A. GIVE PARAGRAPH NUMBER AND WORDING.		
B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES.		
2. COMMENTS ON ANY SPECIFICATION REQUIREMENT CONSIDERED TOO RIGID		
3. IS THE SPECIFICATION RESTRICTIVE?		
<input type="checkbox"/> YES <input type="checkbox"/> NO IF "YES", IN WHAT WAY?		
4. REMARKS (Attach any pertinent data which may be of use in improving this specification. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity)		
SUBMITTED (Printed or typed name and activity)		DATE

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Naval Air Engineering Center
Philadelphia, Pennsylvania 19112

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