

Canadian General Standards Board

CGSB

Office des normes générales du Canada

ONGC

**1-GP-112d
July 1970**

**(F)1-GP-112d
Juillet 1970**

WITHDRAWAL

October 1986

**CANADIAN GENERAL
STANDARDS BOARD**

LACQUER, STENCIL

This standard is hereby withdrawn. It has been determined that the material covered by this standard is no longer used in quantities that would warrant the continued maintenance of the standard.

RETRAIT

Octobre 1986

**OFFICE DES NORMES
GÉNÉRALES DU CANADA**

**LAQUE POUR APPLICATION
AU POCHOIR**

Cette norme est retirée par le présent avis. Il a été constaté que le matériau qui fait l'objet de la présente norme n'est plus utilisé en quantité suffisante pour maintenir cette norme en vigueur.

Canada



**STANDARD
FOR
LACQUER: STENCIL**

1-GP-112d

JULY 1970

**SUPERSEDES 1-GP-112C
9 FEBRUARY 1962**

**THIS STANDARD APPLIES TO LACQUER SUITABLE FOR APPLICATION BY SPRAY THROUGH A
STENCIL TO PAINTED AND UNPAINTED WOOD, AND PAINTED METAL SURFACES.**

MINISTÈRE DES APPROVISIONNEMENTS ET SERVICES



DEPARTMENT OF SUPPLY AND SERVICES

COMMITTEE ON PAINTS, PIGMENTS AND RELATED COMMODITIES

and

Aeronautical, Equipment and Ammunition Subcommittee

(Membership at date of approval by the Committee)

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FOREWORD

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Address requests for CGSB publications, or suggestions for their improvement, to:

Canadian Government Specifications Board
c/o Department of Supply and Services
Ottawa, Canada.

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Standard
for

LACQUER: STENCIL

1. DEFINITION

1.1 This standard applies to lacquer suitable for application by spray through a stencil to painted and unpainted wood, and painted metal surfaces.

1.2 For more detailed information on uses, see par. 8.1.

2. APPLICABLE PUBLICATIONS

2.1 The following publications are applicable to this standard:

2.1.1 CGSB 1-GP-12c, Standard Paint Colors.

2.1.2 CGSB 1-GP-71, Methods of Testing Paints and Pigments.

2.1.3 ASTM Standards on Paint, Varnish, Lacquer and Related Products.

2.2 Reference to the above publications or to test methods therein is to the issues in effect on the date of invitation to tender, unless otherwise specified in the purchase documents.

3. CLASSIFICATION

3.1 The lacquer shall be supplied in one class.

4. GENERAL REQUIREMENTS

4.1 Lacquer complying with this standard shall consist of high-quality colorfast pigments dispersed in a cellulose nitrate vehicle to produce a smooth and homogeneous finish.

4.2 The lacquer as supplied shall be suitable for spraying when reduced with 1-GP-50 or 1-GP-110 thinner in the proportion of two volumes of lacquer to one of thinner.

4.3 The lacquer shall not thicken excessively or cake in the original unopened containers for one year from date of shipment when stored at a temperature not exceeding 100°F (38°C). At the end of this time it shall be readily mixed to a uniform condition by stirring and shall meet the requirements of this standard.

5. DETAIL REQUIREMENTS

Lacquer to this standard shall comply with the following detail requirements:

				Test Method	
		Min	Max	1-GP-71	ASTM
5.1	Drying Time, Set-to-Touch, sec	-	15	5.1	-
5.2	Consistency of thinned lacquer (par. 4.2), No. 4 Ford Cup, sec	17	22	-	D1200
5.3	Gloss	-	20	13.1	-
5.4	Hiding Power*, sq ft/gal (m ² /liter)	400 8.17	-	14.2	-
5.5	Fineness of Grind, Hegman	6	-	-	D1210
5.6	Benzene**	-	NIL	65.1	-
5.7	Chlorinated compounds boiling below 257°F (125°C)**	-	NIL	73.1	-

5.8 Color - The color of the lacquer shall conform to such 1-GP-12c flat color as may be specified in the purchase documents.

Method 12.9

5.9 Water Resistance - The dried lacquer film shall withstand 24 hours immersion in water at 73°F (23°C) without showing wrinkling, blistering or loss of adhesion. After 24 hours there shall be no evidence of softening or color change.

Method 110.1

5.10 Scratch Resistance - The dried lacquer film shall withstand the scratch test under a load of 1,000 grams without exposing the metal through the scratch of the film.

Method 116.8

* (m²/liter) Hiding Power expressed as coverage in square meters per liter of paint.

** This requirement may be checked at the discretion of the testing authority.

8.1.4 It is not good practice to apply this lacquer to unprotected and unprimed metal surfaces, since bond will be lacking in some cases and corrosion will destroy it in others. Galvanized metal should be primed with 1-GP-121 vinyl wash primer, or alternatively cleaned with 31-GP-107 metal conditioner and coated with 1-GP-132 primer before stencilling. Surfaces to which the lacquer is to be applied must be free from grease, oil, dirt or loose chalk as well as from flaking, peeling, cracking or other state of deterioration.

8.2 Ordering Data - In ordering lacquer to this standard, the purchaser should specify the following:

- (a) Color
- (b) Packaging, packing and marking details if commercial practice is not suitable (par. 6.1)
- (c) If qualified product is required.

8.3 Qualification

8.3.1 *Qualification Procedure* - Details of the procedure for qualification of 1-GP-112 lacquers may be obtained from:

Director General
Quality Assurance
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Canada.

8.3.2 *Qualified Products* - Federal government departments or agencies may also obtain information from the above address regarding availability of qualified products.

8.4 This standard supersedes in part Inspection Board Specification INB 92, Marking Material for Ammunition, Quick Drying.

8.5 The publications referred to in par. 2.1.1 and 2.1.2 are available from the Canadian Government Specifications Board.

8.6 The publication referred to in par. 2.1.3 is available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103, U.S.A.

8.7 SI (Metric) Units - The SI (Metric) equivalents for customary inch/pound units are shown in this standard. Since the equivalents are not exact, the SI values are for information only, to familiarize readers with units that will ultimately be adopted nationally.

5.11 Flexibility - The dried lacquer film shall show no cracking nor peeling when subjected to the bending test, using a 1/8 inch (3.2 mm) mandrel.

Method 119.9

5.12 Accelerated Weathering Resistance - The dried lacquer film shall withstand an exposure period of ten 24-hour cycles in an accelerated weathering machine without loss of adhesion, chalking, or marked color change, and with not more than a slight loss of gloss.

Method 122.15

5.13 Behavior Toward Applied Films

5.13.1 When applied by spray to quick-drying flat enamel, the lacquer shall not cause lifting, wrinkling or softening of the enamel.

Method 131.3

5.13.2 When sprayed through sharply cut stencils, the lacquer shall produce legible, opaque letters, uniform in appearance and free from ragged edges and smears.

Method 131.3

5.14 Outdoor Exposure - One coat of lacquer applied to steel primed with 1-GP-81 primer and exposed for 6 months in the Miami, Florida area, shall show no appreciable film deterioration, no loss of adhesion, and not more than moderate chalking or color change, except that Yellow 505-302 and 505-301 may show more darkening.

Method 143.3

6. PREPARATION FOR DELIVERY

6.1 Unless otherwise specified in the purchase documents, commercial packaging, packing and marking shall be acceptable.

6.2 Labelling - In addition to the labelling requirements of any relevant Acts or Regulations, each container shall be suitably labelled to show the following information:

Manufacturer's Name and Address

Name of Material

CGSB Standard No.

Qualification No. (when required)

1-GP-12c Color

Manufacturer's Batch No.

Manufacturer's Code No.

Date of Manufacture

Thinning Instructions for spraying using 1-GP-50
or 1-GP-110 thinner.

7. INSPECTION

7.1 General - Unless otherwise stipulated in the contract, it is the prime contractor's responsibility to satisfy the inspection authority that the commodity conforms to this standard. This may be accomplished either by performing the tests specified in this standard or by demonstrating to the satisfaction of the inspecting authority that manufacturing processes and techniques are so controlled that conformity to this standard is ensured. The contractor may utilize his own facilities or any commercial testing establishment acceptable to the inspection authority.

7.2 Sampling - Sampling shall be carried out in accordance with Method 1.1 of CGSB 1-GP-71.

7.3 Testing - Unless otherwise specified, the methods of testing shall be those in 1-GP-71.

7.4 Classification of Tests - Tests for determining compliance with this standard shall be classified as follows:

7.4.1 *Qualification Tests* - Those tests that are performed on all samples submitted for qualification as a satisfactory product. They shall consist of the tests necessary to establish compliance with all the requirements of this standard.

7.4.2 *Lot Acceptance Tests* - Those tests that are used to determine the acceptability of a lot or batch of a qualified product. The inspecting authority may request the testing of the material for compliance with any of the requirements of this standard, except outdoor exposure (par. 5.14), and may reject a lot or batch on the basis of any requirement in the standard.

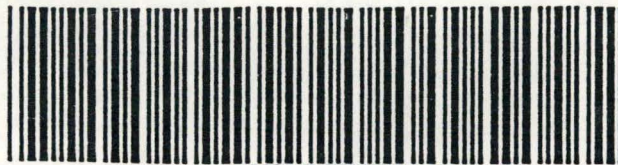
8. NOTES

8.1 Intended Uses

8.1.1 Lacquer complying with this standard is intended for application by spray through stencils onto painted and unpainted surfaces of wooden, paper or painted metal packing boxes, cases, cartons and similar items, for identification purposes. It dries rapidly, and so avoids ragged and blurred characters and also permits rapid stencilling.

8.1.2 This material is especially useful for stencilling ammunition cases and boxes.

8.1.3 It is intended to be tough, adherent and durable, and sufficiently resistant to water to provide permanent identification, although this permanency will be greatly influenced by the durability of the substrate. It may be applied to painted surfaces without danger of lifting or wrinkling.



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