

Canadian General Standards Board

CGSB

Office des normes générales du Canada

ONGC

1-GP-107c  
October 1969

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Octobre 1969

WITHDRAWAL

RETRAIT

April 1986

Avril 1986

CANADIAN GENERAL  
STANDARDS BOARD

OFFICE DES NORMES  
GÉNÉRALES DU CANADA

INK, STENCIL, FOR MARKING  
NON POROUS SURFACES

ENCRE À POCHOIR POUR LE MARQUAGE  
SUR SUBJECTILES NON ABSORBANTS

This standard is hereby withdrawn.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.

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



ANADA

# CANADIAN GOVERNMENT SPECIFICATIONS BOARD

SPECIFICATION

FOR

INK: STENCIL, FOR MARKING  
NONPOROUS SURFACES

1-GP-107c

OCTOBER 1969

SUPERSEDES 1-GP-107B

20 OCTOBER 1961

THIS SPECIFICATION APPLIES TO STENCIL INK SUITABLE FOR APPLICATION  
TO NONPOROUS SURFACES SUCH AS METAL AND GLASS.

DEPARTMENT OF DEFENCE PRODUCTION, OTTAWA, CANADA

15 cents

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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|--------------------------------------|-------------------------------------------------|
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| Ashton, H.E.                         | National Research Council                       |
| Attendu, M.C.                        | Québec Hydro                                    |
| Barry, E.                            | Canadian Paint Manufacturers Association        |
| Brawley, D.J.                        | Department of National Defence                  |
| Buchanan, L.B.                       | Department of National Defence                  |
| Cheesman, H.                         | Department of National Defence                  |
| Chivers, Capt. G.G.                  | Department of National Defence                  |
| Conen, A.J.                          | Interchem of Canada Limited                     |
| Conley, R.J.                         | Department of National Defence                  |
| Delamater, K.                        | Sico Inc.                                       |
| Gareau, A.                           | Ministère de l'Industrie et du Commerce, Québec |
| Girard, J.G. (Subcommittee Chairman) | Department of National Defence                  |
| Hargrave, D.                         | Sherwin-Williams Co. of Canada Limited          |
| Harper, J.L.                         | Department of Supply and Services               |
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| House, H.W.                          | Department of National Defence                  |
| Hughes, L.                           | Interchem of Canada Limited                     |
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| Michell, Dr. J.H.                    | Canadian Industries Limited                     |
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| Stubbs, K.E.                         | Department of Public Works                      |
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| Tremblay, M.                         | Canadian Arsenals Limited                       |
| Watt, J.S.                           | National Harbours Board                         |

Standards Officer - W.J. Ireland, CGSB

1-GP-107c  
October 1969  
Supersedes 1-GP-107b  
20 October 1961

## CANADIAN GOVERNMENT SPECIFICATIONS BOARD

### Specification for

INK: STENCIL, FOR MARKING NONPOROUS SURFACES

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#### 1. DEFINITION

1.1 This specification applies to stencil ink suitable for application to nonporous surfaces such as metal and glass.

1.2 For more detailed information on uses, see 8.1.

#### 2. APPLICABLE PUBLICATIONS

2.1 The following publications are applicable to this specification:

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, to test methods therein, and to other specifications is to the issues in effect on the date of the invitation to tender, unless otherwise specified.

#### 3. CLASSIFICATION

3.1 Stencil ink to this specification shall be supplied in one class.

#### 4. GENERAL REQUIREMENTS

4.1 Ink complying with this specification shall consist of a dispersion of pigment or dye in a suitable quick-drying vehicle.

4.2 The ink shall be suitable for application by fountain brush and stencil board as well as by stencil brush and stencil board. It shall be free from any materials that have a deleterious effect on the tools.

4.3 The ink shall dry to produce uniform and legible flat or eggshell markings.

4.4 The ink shall be supplied ready for use. When necessary, it may be reduced with 1-GP-4 Thinner: Petroleum Spirits, in accordance with the manufacturer's instructions.

4.5 The ink shall not skin, curdle, settle, thicken excessively or cake in the original unopened container for one year from date of shipment when stored at a temperature not exceeding 100°F (32°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 specification.

## 5. DETAIL REQUIREMENTS

Stencil ink to this specification shall comply with the following detail requirements:

|       |                                                   |     |     | Test Method |       |
|-------|---------------------------------------------------|-----|-----|-------------|-------|
|       |                                                   | Min | Max | 1-GP-71     | ASTM  |
| 5.1   | Viscosity, No. 3 Ford Cup, sec                    | 15  | 25  | -           | D1200 |
| 5.2   | Drying Time, Surface-Dry on Glass, min            | -   | 15  | 5.13        | -     |
| 5.3   | Hiding Power, sq ft/gal                           | 400 | -   | 14.1        |       |
| 5.3.1 | Exception: Red and Yellow Colors                  | 300 | -   | 14.1        |       |
| 5.4   | Fineness of Grind, Hegman                         | 7.5 | -   | -           | D1210 |
| 5.5   | Nonvolatile Vehicle, % by wt                      | 20  | -   | 19.1        | -     |
| *5.6  | Benzene                                           | -   | Nil | 65.1        | -     |
| *5.7  | Chlorinated compounds boiling below 257°F (125°C) | -   | Nil | 73.1        | -     |
| 5.8   | Aniline                                           | -   | Nil | 81.1        | -     |

5.9 Color - The color of the stencil ink shall conform to such 1-GP-12c flat colors as may be specified by the purchaser.

Method 12.9

5.10 Skinning Properties - The ink shall be nonskinning.

Method 10.1

5.11 Miscibility with Mineral Spirits - When reduced with an equal volume of 1-GP-4 Thinner: Petroleum Spirits, the ink shall show no evidence of curdling or precipitation after standing 30 minutes.

Method 45.1

\* This requirement may be tested for at the discretion of the inspecting authority.

5.12 Effect on Stencil Brushes - After being allowed to dry on a stencil brush for 18 hours, the ink shall be removed by immersing and cleaning the brush in mineral spirits. This treatment shall leave the brush in a clean condition, free from hard or gummy deposit.

Method 47.1

5.13 Accelerated Weathering - When applied to tinplate panels, the ink shall withstand four 24-hour cycles of accelerated weathering without cracking, peeling or flaking, and at the end of this period shall show not more than slight chalking or change of color.

Method 122.14

5.14 Application Properties - When applied by stencil brush or fountain brush to tinplate, the ink shall leave clean stencil marks free from ragged edges, smudges and smears. The ink shall be satisfactorily retained in the brush without dripping.

Method 136.2

## 6. PREPARATION FOR DELIVERY

6.1 Unless otherwise specified, commercial packaging, packing and marking shall be acceptable.

6.2 Labelling - In addition to 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  
Qualification No. (when required)  
1-GP-12c Color  
Manufacturer's Batch No.  
Manufacturer's Code No.  
Date of Manufacture  
Thinning Instructions using 1-GP-4 thinner.

## 7. INSPECTION

7.1 Sampling - Sampling shall be in accordance with Method 1.1 of CGSB 1-GP-71.

7.2 Testing - The methods of test shall be as specified with each requirement.

7.3 Classification of Tests - Tests for determining compliance with this specification shall be classified as follows:

- 7.3.1 *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 specification.
- 7.3.2 *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 specification and may reject a lot or batch on the basis of any requirement in the specification.

## 8. NOTES

### 8.1 Intended Uses

- 8.1.1 Ink complying with this specification is suitable for application by fountain brush and stencil board, and by stencil brush and stencil board.
- 8.1.2 This ink is suitable for application to nonporous surfaces such as metal, glass and porcelain. It may also be applied to such surfaces covered with 1-GP-47 obliterating paint.

8.2 Ordering Data - Purchasers should specify color required (par. 5.9); packaging, packing and marking details if commercial practice is not suitable (par. 6.1); and if a qualified product is required.

### 8.3 Qualification

- 8.3.1 *Qualification Procedure* - Details of procedure for qualification of 1-GP-107 stencil inks may be obtained from:

Quality Assurance Division  
Technical Services Branch  
Canadian Forces Headquarters  
Department of National Defence  
Ottawa 4, Canada.

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

### 8.4 Related Specifications (as to use)

- 8.4.1 1-GP-106, Ink: Stencil, for Marking Porous Surfaces
- 8.4.2 1-GP-115, Ink: Paste

8.5 The publications referred to in par. 2.1 and 2.2 are obtainable from the Canadian Government Specifications Board.

8.6 The publication referred to in par. 2.3 is obtainable from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pa. 19103, U.S.A.

Withdrawn/Retirée

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Correspondence regarding this specification should be addressed to the Canadian Government Specifications Board, c/o Department of Supply and Services, Ottawa 4, Canada.