

1-GP-35b
11 August 1961
CANCELLATION
5 October 1968

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

PAINT: GRAPHITE, BLACK

CGSB Specification 1-GP-35b, dated 11 August 1961, is cancelled as of 5 October 1968, as there is now no demand for this paint.

1-GP-35b
11 August 1961
AMENDMENT NO. 1
17 May 1963

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

PAINT; GRAPHITE, BLACK

5. DETAIL REQUIREMENTS

5.3 Drying Time - Change "Dry-Hard" to read "Surface Dry."



CANADA

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

ARCHIVES COPY
SPECIFICATION

FOR

PAINT; GRAPHITE, BLACK

1 - GP - 35b

11 AUGUST 1961

SUPERSEDES 1 - GP - 35A

1 NOVEMBER 1957

THIS SPECIFICATION APPLIES TO READY - MIXED GRAPHITE PAINT
SUITABLE FOR EXTERIOR USE ON PRIMED METALS

NATIONAL RESEARCH COUNCIL, OTTAWA, CANADA

Price

15 CENTS

For the convenience of those wishing to purchase publications of the Canadian Government Specifications Board, a coupon system has been introduced in order to make payment for these publications relatively simple. Coupons are available in denominations of 5¢, 25¢, and 50¢, and may be obtained by forwarding a remittance to the National Research Council in the form of Bank, Express, or Post Office Money Order, or a cheque made payable at par in Ottawa, to Receiver General of Canada, credit National Research Council (stamps are not acceptable). These coupons may then be used when submitting orders for publications. An Index of Specifications is available on request.

COMMITTEE ON SPECIFICATIONS FOR PAINTS,
PIGMENTS AND RELATED COMMODITIES

Construction and Maintenance Subcommittee

(Membership at date of approval by the Committee
for submission to the CGSB)

Apperson, J.
Armstrong, W.N.B.
Ashton, H.E.
Attendu, F/L M.C.
Barlow, E.A.
Barry, E.
Beckwith, Dr. N.P.
Biddle, W.H.
Black, J.W.
Brough, E.S.
Cameron, J.R.
Cassidy, J.W.
Daly, E.G.
DeLisle, E.J.
Dennis, D.A.
DeRosa, P.
Dingley, W.
Dunn, G.S.
Farr, Dr. H.O.
Gibbons, E.V.
Girard, J.G. (Subcommittee Chairman)
Hargrave, D.
Harrington, J.M.
Harris, J.
Hooper, J.S.
Hughes, L.S.
Krayner-Krauss, E.
Latham, W.A.
Laycraft, N.E. (Committee Chairman)
Leveille, J.
MacQuarrie, L.G.

Marsland, D.F.
McCarthy, J.
McLaren, G.C.
McPherson, Miss E.M.
Mercer, C.R.
Michell, Dr. J.H.
Miller, C.
Mills, W.
O'Dea, F.M.
Olson, J.J.
Poray, M.W.
Powell, J.A.
Rubec, P.
Semenick, M.T.
Showalter, Dr. H.A.
Slaght, L.E.
Smith, S/L D.
Steele, F.L.
Thompson, E.T.
Veer, J.J.G.
Watt, J.S.
Wilson, D.
Young, Major C.
Wolochow, D. (Secretary)

Department of Defence Production
Ontario Research Foundation
National Research Council
Department of National Defence/RCAF
Atomic Energy of Canada Limited
Canadian Paint, Varnish and Lacquer Association
Rinsed-Mason Company of Canada Limited
General Paint Corporation
Department of National Defence/Army
Benjamin Moore and Company Limited
Canadian Industries Limited
Canadian Arsenals Limited
Department of Veterans Affairs
Department of Defence Production
Canadian Pittsburgh Industries Limited
Crown Diamond Paint Company Limited
Department of Mines and Technical Surveys
Inspection Services/DND
Canadian Pittsburgh Industries Ltd.
National Research Council
Department of National Defence/Army
Sherwin-Williams Co. of Canada Limited
Department of Forestry
National Research Council
Roxalin of Canada Limited
Rinsed-Mason Company of Canada Limited
Crown Diamond Paint Company
Department of Justice
Department of Public Works/Testing Laboratories
International Laboratories
Department of Northern Affairs and National
Resources
Central Mortgage and Housing Corporation
The Standard Manufacturing Company Ltd.
Inspection Services/DND
Defence Research Board
Brandram-Henderson Limited
Canadian Industries Limited
Protective Coatings Limited
The Glidden Company Limited
Wesco Paints Ltd.
Department of Public Works
Department of National Defence/Naval
Scarfe and Company
Department of Public Works/Testing Laboratories
Department of National Defence/Naval
Inspection Services/DND
Department of Transport
Department of National Defence/RCAF
The Glidden Company Limited
The Sherwin-Williams Co. of Canada Ltd.
Department of Forestry
National Harbours Board
Department of National Defence/Army
Department of National Defence/Army
CGSB/National Research Council

CANADIAN GOVERNMENT SPECIFICATIONS BOARD

Specification
for

PAINT; GRAPHITE, BLACK

1. DEFINITION

1.1 This specification applies to ready-mixed graphite paint suitable for exterior use on primed metal.

1.2 For more detailed information on uses, see 8.1.

2. APPLICABLE PUBLICATIONS

The following publications are applicable to this specification:

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

2.2 ASTM Standards on Paint, Varnish, Lacquer and Related Products (and latest supplement).

2.3 Reference to the above publications and other specifications is to the issues in effect on the date of invitation to tender, unless otherwise specified.

3. CLASSIFICATION

3.1 The paint shall be supplied in one class.

4. GENERAL REQUIREMENTS

4.1 Paint complying with this specification shall consist of a pigment mixture containing graphitic carbon, red lead and extenders, adequately milled with linseed oil together with suitable thinners and driers.

4.2 The paint shall have good flowing and brushing properties and shall dry to a uniform appearance without streaking, running or sagging. The dried paint film may show moderate but not excessive brush marks and shall have an oil gloss appearance.

4.3 The paint shall also be suitable for spraying when reduced with 1-GP-4 thinner in accordance with the manufacturer's instructions.

4.4 The paint shall not skin, thicken excessively or cake in the original unopened container for 12 months from date of shipment when stored at temperatures not exceeding 100°F (38°C). At the end of this time it shall be readily mixed to uniform condition by simple stirring.

4.5 Qualification - When requested by the purchaser, the paint shall be a product qualified by the specified procedure and such qualification shall be a prerequisite for tendering (see 8.6).

5. DETAIL REQUIREMENTS

Paint to this specification shall comply with the following detail requirements:

				Test Method	
		Min	Max	1-GP-71	ASTM
5.1	Flash Point, Pensky-Martens Closed				
	Cup, °F	95	-	3.1	-
	°C	35	-	3.1	-
5.2	Consistency, Krebs units	75	90	4.5	-
5.3	Drying Time, Dry-hard, hr		18	5.1	-
5.4	Hiding Power, sq ft per gal	600	-	14.1	-
5.5	Fineness of Grind, Hegman	3	-	-	D1210
5.6	Volatile Matter, % of paint	-	8	17.1	-
5.7	Nonvolatile Vehicle, %	45	-	19.1	-
5.8	Pigment Content, % of paint	40	-	21.1	-
5.9	Water Content, % of paint	-	0.5	24.1	-
5.10	Pigment Composition, %				
5.10.1	Graphitic Carbon	40	-	74.1	-
5.10.2	Red Lead (Pb ₃ O ₄)	6	10	50.3	-
5.10.3	Insoluble Siliceous matter, %	30	-	50.14	-
5.11	Rosin and Rosin Derivatives		Nil	60.1	-

5.12 Skinning Properties - The paint shall be nonskinning.

Method 10.1

5.13 Extracted Nonvolatile Vehicle - The extracted nonvolatile vehicle shall meet the following analytical requirements:

				ASTM
		Min	Max	Test Method
*	Iodine Value of Fatty Acids	155	-	D215
*	Saponification Number	190	-	D555

5.14 Accelerated Storage Stability - The paint shall withstand 48 hours heating at 140°F (60°C) without thickening or hard-caking. The Storrer viscosity shall not change by more than 5 Krebs units and the paint shall meet the requirement for drying time (5.3).

Method 30.3

5.15 Accelerated Weathering Resistance - The dried paint film shall withstand an exposure period of ten 24-hour cycles without blistering, chalking, checking, flaking or appreciable color change.

Method 122.6

* These tests to be made at the discretion of the testing authority.

5.16 Applicability and Appearance - When applied to the surface of a steel panel, the paint shall demonstrate good hiding, spreading, levelling and brushing properties, ease of lap-in, uniform surface appearance and freedom from sagging.

Method 134.8

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
CGSB Specification No.
Qualification No. (when required)
Manufacturer's Batch No.
Manufacturer's Code No.
Thinning Instructions, using 1-GP-4 thinner.

7. INSPECTION

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

7.2 Testing - The methods of test shall be those specified in 1-GP-71 or in ASTM Standards on Paint, Varnish, Lacquer and Related Products using the Method 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 samples submitted for qualification as a satisfactory product. They shall consist of all the tests necessary to establish compliance with 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 testing authority may test 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 Paint complying with this specification is a black linseed oil type finish, intended primarily for exterior use as a topcoat on metal.

This coating has its most useful function in the painting of structural steel surfaces primed with 1-GP-14 or 1-GP-40 primer. As graphite imparts fume resistance, this paint has useful applications in areas of high fume concentration such as bridges frequently underpassed by trains, or in industrial areas.

This coating may also be used as a topcoat for exterior wood that has been suitably primed with 1-GP-55 primer.

8.1.2 Previously painted steel surfaces should be thoroughly cleaned and one or two coats applied as necessary when there are no film defects. If flaking, blistering or cracking has occurred, wire brush, scrape or blast areas of failure and prime with suitable primer before applying this paint.

8.2 Ordering Data - The purchaser shall specify packaging, packing and marking if commercial practice is not suitable; and if qualification is required.

8.3 Qualification Procedure - Details regarding procedure for qualification of 1-GP-35 paint may be obtained from:

Chief, Testing Laboratories
Department of Public Works
OTTAWA, Ontario.

8.4 The publication referred to in 2.1 is obtainable from the CGSB Secretary.

8.5 The publication referred to in 2.2 is obtainable from the American Society for Testing Materials, 1916 Race Street, Philadelphia 3, Pa., U.S.A.