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Canadian General
Standards Board Office des normes
générales du Canada

Series 1
Série des 1

WITHDRAWAL

October 2011

Selected standards in the series Paints, pigments and related products

These CGSB standards and National Standards of Canada are hereby withdrawn due to limited use and support for their revision.

The Standards Council of Canada requires that accredited Standards Development Organizations, such as the CGSB, regularly review a consensus Standard to determine whether to re-approve, revise or withdraw. The review cycle is normally five years from the publication date of the latest edition of the Standard.

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RETRAIT

Octobre 2011

Sélection de normes de la série Peintures, pigments et produits connexes

Ces normes de l'ONGC et ces Normes nationales du Canada sont retirées par le présent avis en raison de leur utilisation limitée et du manque de support pour leur révision.

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to be referred to for archival purposes only as their content has been repealed as of the date on this withdrawal notice.

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CAN/CGSB-1.5-M91

Low Flash Petroleum Spirits Thinner
(ICS 87.040)

CAN/CGSB-1.28-98

Exterior Alkyd House Paint (ICS 87.040)

CAN/CGSB-1.36-97

General Purpose Interior Alkyd Varnish
(ICS 87.040)

CAN/CGSB-1.38-2000

Interior Enamel Undercoater (ICS 87.040)

CAN/CGSB-1.40-97

Anticorrosive Structural Steel Alkyd Primer
(ICS 87.040)

CAN/CGSB-1.57-2003

Interior Alkyd Semigloss Enamel
(ICS 87.040)

CAN/CGSB-1.59-97

Alkyd Exterior Gloss Enamel (ICS 87.040)

CAN/CGSB-1.60-97

Interior Alkyd Gloss Enamel (ICS 87.040)

cette information. Ces normes doivent être consultées à des fins archivistiques seulement puisque leur contenu a été révoqué à la date du présent avis de retrait.

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CAN/CGSB-1.5-M91

Diluant, essence minérale à faible point d'éclair (ICS 87.040)

CAN/CGSB-1.28-98

Peinture aux résines alkydes d'extérieur pour bâtiments (ICS 87.040)

CAN/CGSB-1.36-97

Vernis d'intérieur aux résines alkydes d'usage général (ICS 87.040)

CAN/CGSB-1.38-2000

Peinture-émail d'intérieur, pour couche de fond (ICS 87.040)

CAN/CGSB-1.40-97

Peinture pour couche primaire anticorrosion, aux résines alkydes, pour acier de construction (ICS 87.040)

CAN/CGSB-1.57-2003

Peinture-émail, d'intérieur, semi-brillante, aux résines alkydes (ICS 87.040)

CAN/CGSB-1.59-97

Peinture-émail, d'extérieur, brillante, aux résines alkydes (ICS 87.040)

CAN/CGSB-1.60-97

Peinture-émail brillante d'intérieur aux résines alkydes (ICS 87.040)

CAN/CGSB-1.61-2004

Exterior and Interior Marine Alkyd Enamel
(ICS 87.040)

CAN/CGSB-1.69-98

Aluminum Paint (ICS 87.040)

1-GP-71 (Oct 1983)

Methods of Testing Paints and Pigments
(ICS 87.040)

1-GP-71

Methods of Testing Paints and Pigments

No. 5-96

Drying Times of Paints and Related
Coatings (ICS 87.040)

No. 38-96

Blushing Resistance of Lacquer
Finishes (ICS 87.040)

No. 73-96

Beilstein Test for Chlorinated Solvents
(ICS 87.040)

CAN/CGSB-1.73-97

Exterior and Interior Enamel for Floors
(ICS 87.040)

CAN/CGSB-1.74-2001

Alkyd Traffic Paint (ICS 87.040)

CAN/CGSB-1.76-2000

Interior and Exterior Heat-Resistant Enamel
(ICS 87.040)

CAN/CGSB-1.81-M90

Air Drying and Baking Alkyd Primer for
Vehicles and Equipment (ICS 87.040)

CAN/CGSB-1.84-M91

Alkyd Primer for Hardwood (ICS 87.040)

CAN/CGSB-1.61-2004

Peinture-émail aux résines alkydes,
d'extérieur et d'intérieur, marine
(ICS 87.040)

CAN/CGSB-1.69-98

Peinture à l'aluminium (ICS 87.040)

1-GP-71 (oct. 1983)

Méthodes d'essai des peintures et pigments
(ICS 87.040)

1-GP-71

Méthodes d'essai des peintures et pigments

N° 5-96

Durée de séchage des peintures et
revêtements apparentés (ICS 87.040)

N° 38-96

Résistance à l'opalescence des
produits-laque de finition (ICS 87.040)

N° 73-96

Détermination de la présence de
solvants chlorés par l'essai de Beilstein
(ICS 87.040)

CAN/CGSB-1.73-97

Peinture-émail d'extérieur et d'intérieur,
pour sols (ICS 87.040)

CAN/CGSB-1.74-2001

Peinture alkyde de démarcation routière
(ICS 87.040)

CAN/CGSB-1.76-2000

Peinture-émail résistant à la chaleur,
d'intérieur et d'extérieur (ICS 87.040)

CAN/CGSB-1.81-M90

Peinture pour couche primaire aux résines
alkydes, séchant à l'air ambiant et au four,
pour véhicules automobiles et équipement
(ICS 87.040)

CAN/CGSB-1.84-M91

Peinture d'impression aux résines alkydes,
pour bois dur (ICS 87.040)

CAN/CGSB-1.88-92

Gloss Alkyd Enamel, Air Drying and Baking
(ICS 87.040)

CAN/CGSB-1.100-99

Interior Flat Latex Paint (ICS 87.040)

CAN/CGSB-1.104-M91

Semigloss Alkyd Air Drying and Baking
Enamel (ICS 87.040)

CAN/CGSB-1.105-M91

Quick-Drying Primer (ICS 87.040)

CAN/CGSB-1.114-M91

Quick-Drying Flat Enamel (ICS 87.040)

CAN/CGSB-1.118-95

Interior Flat Alkyd Finish (ICS 87.040)

CAN/CGSB-1.119-2000

Interior Latex Primer-Sealer (ICS 87.040)

CAN/CGSB-1.122-99

Anticorrosive Vinyl Primer (ICS 87.040)

CAN/CGSB-1.132-M90

Zinc Chromate Primer, Low Moisture
Sensitivity (ICS 87.040)

CAN/CGSB-1.135-99

Flat Alkyd Enamel for Equipment
(ICS 87.040)

CAN/CGSB-1.138-97

Exterior Latex Flat Paint (ICS 87.040)

CAN/CGSB-1.143-98

Silicone Alkyd Heat-Resistant Aluminum
Enamel (ICS 87.040)

CAN/CGSB-1.88-92

Peinture-émail brillante aux résines alkydes,
séchant à l'air ambiant et au four
(ICS 87.040)

CAN/CGSB-1.100-99

Peinture-émulsion mate d'intérieur
(ICS 87.040)

CAN/CGSB-1.104-M91

Peinture-émail semi-brillante aux résines
alkydes séchant à l'air ambiant et au four
(ICS 87.040)

CAN/CGSB-1.105-M91

Peinture pour couche primaire à séchage
rapide (ICS 87.040)

CAN/CGSB-1.114-M91

Peinture-émail mate à séchage rapide
(ICS 87.040)

CAN/CGSB-1.118-95

Peinture de finition mate d'intérieur aux
résines alkydes (ICS 87.040)

CAN/CGSB-1.119-2000

Peinture-émulsion d'impression d'intérieur
(ICS 87.040)

CAN/CGSB-1.122-99

Peinture pour couche primaire, aux résines
vinyliques, anticorrosion (ICS 87.040)

CAN/CGSB-1.132-M90

Peinture pour couche primaire, au chromate
de zinc, à faible sensibilité à l'humidité
(ICS 87.040)

CAN/CGSB-1.135-99

Peinture-émail mate aux résines alkydes
pour équipement (ICS 87.040)

CAN/CGSB-1.138-97

Peinture-émulsion (latex) mate, d'extérieur
(ICS 87.040)

CAN/CGSB-1.143-98

Peinture-émail aux résines silicones-
alkydes résistante à la chaleur (ICS 87.040)

CAN/CGSB-1.145-97

Solvent-Based Pigmented Stain
(ICS 87.040)

CAN/CGSB-1.146-99

Cold Curing, Gloss Epoxy Coating
(ICS 87.040)

CAN/CGSB-1.150-M91

Clear Lacquer for Wood Furniture
(ICS 87.040)

CAN/CGSB-1.153-2000

High-Build, Gloss Epoxy Coating
(ICS 87.040)

CAN/CGSB-1.154-M89

Latex Type Paint for Concrete Floors
(ICS 87.040)

CAN/CGSB-1.158-M89

Cellulose Nitrate Primer, Modified Alkyd
Type (ICS 87.040)

CAN/CGSB-1.159-92

Acrylic Cellulose Nitrate Gloss Lacquer
(ICS 87.040)

CAN/CGSB-1.160-93

Low Gloss Acrylic Cellulose Nitrate
Lacquer (ICS 87.040)

CAN/CGSB-1.162-2004

Emulsion Coating for Stucco and Masonry
(ICS 87.040)

CAN/CGSB-1.165-2004

Cold-Curing Epoxy Primer (ICS 87.040)

CAN/CGSB-1.171-98

Inorganic Zinc Coating (ICS 87.040)

CAN/CGSB-1.175-97

Polyurethane Interior Coating (ICS 87.040)

CAN/CGSB-1.145-97

Teinture pigmentée à base de solvant
(ICS 87.040)

CAN/CGSB-1.146-99

Revêtement aux résines époxydiques,
durcissant à froid, brillant (ICS 87.040)

CAN/CGSB-1.150-M91

Vernis-laque pour meubles en bois
(ICS 87.040)

CAN/CGSB-1.153-2000

Revêtement par peinture aux résines
époxydiques, à pouvoir garnissant élevé,
brillant (ICS 87.040)

CAN/CGSB-1.154-M89

Peinture-émulsion (latex) pour sols en béton
(ICS 87.040)

CAN/CGSB-1.158-M89

Peinture-laque pour couche primaire, au
nitrate de cellulose et aux résines alkydes
modifiées (ICS 87.040)

CAN/CGSB-1.159-92

Produit-laque brillant à la résine acrylique et
au nitrate de cellulose (ICS 87.040)

CAN/CGSB-1.160-93

Peinture-laque aux résines acryliques et au
nitrate de cellulose, peu brillante
(ICS 87.040)

CAN/CGSB-1.162-2004

Revêtement de type émulsion pour stuc et
maçonnerie (ICS 87.040)

CAN/CGSB-1.165-2004

Peinture pour couche primaire aux résines
époxydiques, durcissant à froid
(ICS 87.040)

CAN/CGSB-1.171-98

Enduit au zinc minéral (ICS 87.040)

CAN/CGSB-1.175-97

Revêtement de polyuréthane d'intérieur
(ICS 87.040)

CAN/CGSB-1.176-2000

Interior Clear Moisture-Curing Polyurethane Coating (ICS 87.040)

CAN/CGSB-1.177-M91

Two-Component Polyurethane Coating, Resistant to Chalking and Yellowing (ICS 87.040)

1-GP-180Ma (Feb 1996)

Coating, Polyurethane, Two-Package, General Purpose (ICS 87.040)

CAN/CGSB-1.181-99

Ready-Mixed Organic Zinc-Rich Coating (ICS 87.040)

CAN/CGSB-1.183-99

Zinc-Rich Epoxy Coating (ICS 87.040)

CAN/CGSB-1.184-98

Coal Tar-Epoxy Coating (ICS 87.040)

CAN/CGSB-1.188-2004

Emulsion Filler for Masonry Block (ICS 87.040)

CAN/CGSB-1.189-2000

Exterior Alkyd Primer for Wood (ICS 87.040)

CAN/CGSB-1.190-M90

Sanding Type Primer Surfacer (ICS 87.040)

1-GP-191M (Apr 1980)

Enamel, Automotive Refinishing, Fast Drying, Gloss (ICS 87.040)

1-GP-192Ma (Feb 1985)

Deck Coating, Nonslip, Epoxy (ICS 87.040)

CAN/CGSB-1.176-2000

Revêtement de polyuréthane, d'intérieur, durci à l'humidité, non pigmenté (ICS 87.040)

CAN/CGSB-1.177-M91

Revêtement de polyuréthane, à deux constituants séparés, non jaunissant et non farinant (ICS 87.040)

1-GP-180Ma (févr. 1996)

Revêtement de polyuréthane, à deux constituants séparés, pour utilisation générale (ICS 87.040)

CAN/CGSB-1.181-99

Enduit riche en zinc, organique et préparé (ICS 87.040)

CAN/CGSB-1.183-99

Enduit aux résines époxydiques, riche en zinc (ICS 87.040)

CAN/CGSB-1.184-98

Revêtement à base de goudron de houille-résines époxydiques (ICS 87.040)

CAN/CGSB-1.188-2004

Apprêt-émulsion pour blocs de maçonnerie (ICS 87.040)

CAN/CGSB-1.189-2000

Peinture d'impression, d'extérieur, aux résines alkydes, pour le bois (ICS 87.040)

CAN/CGSB-1.190-M90

Peinture pour couche primaire surfaçante de type ponçable (ICS 87.040)

1-GP-191M (avr. 1980)

Peinture-émail brillante, à séchage rapide, pour le repeinture des carrosseries de véhicules automobiles (ICS 87.040)

1-GP-192Ma (févr. 1985)

Revêtement de pont, antidérapant, aux résines époxydiques (ICS 87.040)

CAN/CGSB-1.193-99

High-Build Epoxy Marine Coating
(ICS 87.040)

CAN/CGSB-1.195-99

Interior Latex Semigloss Paint (ICS 87.040)

CAN/CGSB-1.198-2001

Cementitious Primer for Galvanized
Surfaces (ICS 87.040)

1-GP-200Ma (Jan 1985)

Deck Coating, Nonslip, Polyurethane
(ICS 87.040)

CAN/CGSB-1.202-2003

Interior Alkyd Low Gloss Enamel
(ICS 87.040)

CAN/CGSB-1.203-2003

Exterior Latex Wood Primer (ICS 87.040)

CAN/CGSB-1.204-98

Exterior Latex Pigmented Stain
(ICS 87.040)

CAN/CGSB-1.205-2003

Sealer for Application to Asbestos-Fibre
Releasing Materials (ICS 87.040)

CAN/CGSB-1.207-98

Low-Temperature Curing Epoxy Coating
(ICS 87.040)

CAN/CGSB-1.208-99

Marine Interior Water-Borne Gloss Enamel
(ICS 87.040)

CAN/CGSB-1.209-2003

Interior Latex Low Gloss Paint (ICS 87.040)

CAN/CGSB-1.210-2003

Quick-Drying Alkyd Primer for Structural
Steel (ICS 87.040)

CAN/CGSB-1.193-99

Revêtement aux résines époxydiques, à
pouvoir garnissant élevé, marin
(ICS 87.040)

CAN/CGSB-1.195-99

Peinture-émulsion semi-brillante d'intérieur
(ICS 87.040)

CAN/CGSB-1.198-2001

Peinture primaire additionnée de ciment,
pour surfaces galvanisées (ICS 87.040)

1-GP-200Ma (janv. 1985)

Revêtement de pont, antidérapant, aux
résines polyuréthanes (ICS 87.040)

CAN/CGSB-1.202-2003

Peinture-émail d'intérieur, aux résines
alkydes, peu brillante (ICS 87.040)

CAN/CGSB-1.203-2003

Peinture-émulsion (latex) d'impression
extérieure, pour bois (ICS 87.040)

CAN/CGSB-1.204-98

Teinture-émulsion pigmentée pour extérieur
(ICS 87.040)

CAN/CGSB-1.205-2003

Peinture d'obturation pour matériaux
renfermant des fibres d'amiante
(ICS 87.040)

CAN/CGSB-1.207-98

Revêtement aux résines époxydiques
durcissant à basse température
(ICS 87.040)

CAN/CGSB-1.208-99

Peinture-émail brillante en suspension
aqueuse, marine, d'intérieur (ICS 87.040)

CAN/CGSB-1.209-2003

Peinture-émulsion d'intérieur peu brillante
(ICS 87.040)

CAN/CGSB-1.210-2003

Peinture primaire aux résines alkydes à
séchage rapide pour acier de charpente
(ICS 87.040)

CAN/CGSB-1.211-95

Coating Systems for Marine Floating Navigational Aids (Buoys) (ICS 87.040)

CAN/CGSB-1.212-2004

Heavy-Metal-Free Marine Primer for Steel and Light-Alloy Surfaces (ICS 87.040)

CAN/CGSB-1.213-2004

Etch Primer (Pretreatment Coating or Tie Coat) for Steel and Aluminum (ICS 87.040)

CAN/CGSB-1.214-2004

Heavy-Metal-Free, Water-Borne, Marine Primer for Steel and Light-Alloy Surfaces (ICS 87.040)

CAN/CGSB-1.215-96

Two-Package Epoxy Blockfiller (ICS 87.040)

CAN/CGSB-1.216-97

Exterior Water-Borne Gloss Enamel (ICS 87.040)

CAN/CGSB-1.219-2001

Lead and Chromate-Free Waterborne Traffic Paint (ICS 87.040)

CAN/CGSB-1.220-2001

Lead and Chromate-Free Alkyd Traffic Paint (ICS 87.040)

CAN/CGSB-1.223-2004

Heavy-Metal-Free, Water-Borne Wash Primer-Tie Coat (ICS 87.040)

CAN/CGSB-1.300-2000

Applied Coating System of Semigloss Baked Finish for Metal Office Furniture (ICS 87.040)

CAN/CGSB-1.500-75

Methods for Test for Toxic Trace Elements in Protective Coatings (ICS 87.040)

CAN/CGSB-1.211-95

Systèmes de revêtement pour aides à la navigation flottantes (bouées) (ICS 87.040)

CAN/CGSB-1.212-2004

Peinture primaire sans métal lourd, marine, pour surfaces en acier et en alliage léger (ICS 87.040)

CAN/CGSB-1.213-2004

Peinture primaire réactive (enduit de traitement préliminaire ou couche de liaison) pour l'acier et l'aluminium (ICS 87.040)

CAN/CGSB-1.214-2004

Peinture primaire, sans métal lourd, en suspension aqueuse, marine, pour surfaces en acier et en alliage léger (ICS 87.040)

CAN/CGSB-1.215-96

Apprêt pour blocs aux résines époxydiques en deux constituants (ICS 87.040)

CAN/CGSB-1.216-97

Peinture-émail brillante d'extérieur en suspension aqueuse (ICS 87.040)

CAN/CGSB-1.219-2001

Peinture à l'eau de démarcation routière sans plomb ni chromate (ICS 87.040)

CAN/CGSB-1.220-2001

Peinture alkyde de démarcation routière sans plomb ni chromate (ICS 87.040)

CAN/CGSB-1.223-2004

Peinture primaire réactive – Couche de liaison, sans métal lourd, en suspension aqueuse (ICS 87.040)

CAN/CGSB-1.300-2000

Système de revêtement de finition semi-brillant, cuit au four, pour meubles métalliques de bureau (ICS 87.040)

CAN/CGSB-1.500-75

Méthodes d'essai des éléments toxiques à l'état de trace dans les revêtements protecteurs (ICS 87.040)

CAN/CGSB-1.501-M89

Method for Permeance of Coated
Wallboard (ICS 87.040)

CAN/CGSB-1.501-M89

Méthode de détermination de la perméance
des panneaux muraux revêtus (ICS 87.040)



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CAN/CGSB-1.165-2004

Supersedes CAN/CGSB-1.165-M89

Cold-Curing Epoxy Primer

ICS 87.040

National Standard of Canada

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Although the intended primary application of this standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

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The principal objectives of the Council are to foster and promote voluntary standardization as a means of advancing the national economy, benefiting the health, safety and welfare of the public, assisting and protecting the consumer, facilitating domestic and international trade, and furthering international co-operation in the field of standards.

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Approval of a standard as a National Standard of Canada indicates that a standard conforms to the criteria and procedures established by the Standards Council of Canada. Approval does not refer to the technical content of the standard; this remains the continuing responsibility of the accredited standards-development organization.

Those who have a need to apply standards are encouraged to use National Standards of Canada whenever practicable. These standards are subject to periodic review; therefore, users are cautioned to obtain the latest edition from the organization preparing the standard.

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COLD-CURING EPOXY PRIMER

Prepared by the

Canadian General Standards Board



Approved by the

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COLD-CURING EPOXY PRIMER

1. SCOPE

1.1 This standard applies to cold-curing, two-package epoxy primer for use on unpainted ferrous and non-ferrous metals.

1.2 This primer is intended for use on ferrous and non-ferrous metals under topcoats that conform to CAN/CGSB-1.146, CAN/CGSB-1.153, CAN/CGSB-1.177, CGSB standard 1-GP-180, CAN/CGSB-1.193, and CGSB standard 1-GP-200.

1.3 The testing and evaluation of a product against this standard may require the use of materials and/or equipment that could be hazardous. This document does not purport to address all the safety aspects associated with its use. Anyone using this standard has the responsibility to consult the appropriate authorities and to establish appropriate health and safety practices in conjunction with any applicable requirements prior to its use.

2. REFERENCED PUBLICATIONS

2.1 The following publications are referenced in this standard:

2.1.1 Canadian General Standards Board (CGSB)

1-GP-71 — Methods of Testing Paints and Pigments

CAN/CGSB-1.146 — Cold Curing Gloss Epoxy Coating

CAN/CGSB-1.153 — High Build Gloss Epoxy Coating

CAN/CGSB-1.177 — Two-Component Polyurethane Coating, Resistant to Chalking and Yellowing

1-GP-180 — Two-Package General Purpose Polyurethane Coating

CAN/CGSB-1.193 — High-Build Epoxy Marine Coating

1-GP-200 — Deck Coating, Non-slip, Polyurethane.

2.1.2 Health Canada

Surface Coating Materials Regulations

Consumer Chemicals and Containers Regulations, 2001

Controlled Products Regulations (WHMIS)¹.

2.1.3 ASTM International

D 714 — Standard Test Method for Evaluating Degree of Blistering of Paints

D 1210 — Standard Test Method for Fineness of Dispersion of Pigment-Vehicle Systems by Hegman-Type Gage

D 3359 — Standard Test Methods for Measuring Adhesion by Tape Test.

2.2 A dated reference in this standard is to the issue specified. An undated reference in this standard is to the latest issue, unless otherwise specified by the authority applying this standard. The sources are given in the Notes section.

3. GENERAL REQUIREMENTS

3.1 The pigment shall be adequately dispersed in the resin component only.

¹ WHMIS: Workplace Hazardous Materials Information System.

- 3.2 When held at $23 \pm 2^\circ\text{C}$, the mixed components shall remain suitable for application for a period of 8 h with, if specified, the addition of a maximum of 10% by volume of the type of thinner recommended by the manufacturer.
- 3.3 When stored at temperatures between 5 and 40°C , the two components shall not skin, gel, thicken excessively or cake in the original unopened containers for one year from the date of shipment. At the end of this time, they shall be readily mixed to a uniform condition by stirring. When the two components are mixed together as described in par. 3.4, the primer shall meet the requirements for applicability and appearance (par. 4.6).
- 3.4 When the two components are adequately mixed together and allowed to stand according to the manufacturer's instructions, the mixture shall be suitable for spraying or brushing when used in accordance with the manufacturer's instructions. The mixture shall have good flow-out properties and shall dry to a matte or low-gloss uniform appearance without streaking, running or sagging, and with good adhesion when applied on cleaned steel and aluminum.
- 3.5 **Toxic Elements** — The primer shall conform to the requirements of the *Surface Coating Materials Regulations*, the *Consumer Chemicals and Containers Regulations*, 2001, and the *Controlled Products Regulations* (WHMIS), for designated toxic elements.

4. DETAILED REQUIREMENTS

When mixed in accordance with the manufacturer's instructions and tested or applied for test between 2 to 4 h after mixing, the two components (without reduction) shall produce a material complying with the following detailed requirements when tested in accordance with the specified test methods:

		Test Method			
		Min.	Max.	CGSB 1-GP-71	ASTM
4.1	Consistency, Krebs Units	—	60	4.5	—
4.2	Dry hard, h	—	8	5, Method A	—
4.3	Fineness of grind, Hegman	4	—	—	D 1210
4.4	Volatile matter, % by mass of material ready for use	—	35	17.1 ²	—
4.5	Adhesion — The primer film applied as specified in par. 4.6 and cured 7 d shall have an adhesion rating of not less than 5A when subjected to the X-cut tape test in accordance with ASTM D 3359, Method A.				
4.6	Applicability and Appearance — A coat of the primer applied after mixing in accordance with par. 3.4 shall be uniform in appearance, with no coarse particles, sagging, wrinkling or excessive brush marks, when applied on cleaned steel panels and tested in accordance with CGSB standard 1-GP-71, Method 134.8.				
4.7	Self-lifting — After drying for 24 h, a film of primer prepared as specified in par. 6.2 shall remain intact when a second coat of primer is applied and tested in accordance with CGSB standard 1-GP-71, Method 132.1.				
4.8	Behaviour Toward Topcoats — There shall be no blistering, wrinkling, softening, lifting or other defects when a coating conforming to CAN/CGSB-1.146 is applied over a film of primer that has dried for 24 h. The gloss of the topcoat shall not be less than 80 units when tested in accordance with CGSB standard 1-GP-71, Method 130.3, on panels prepared in accordance with par. 6.2.				
4.9	Salt Spray Resistance — Unscored steel panels (CGSB 1-GP-71, Method 100.2) coated with the primer shall show no rusting when exposed 240 h in the salt spray cabinet, and the film shall not show more than medium No. 8 permanent blistering in accordance with ASTM D 714. Scored panels shall not show more than 1.5 mm undercreepage after the same period.				

² The volatile matter is determined (CGSB 1-GP-71, Method 17.1) on each component separately or on the mixed material. When performed on the individual components, the volatile matter of the material ready for use is calculated for the mixture obtained when the components are combined in the proportions recommended by the manufacturer.

5. PREPARATION FOR DELIVERY

5.1 Unless otherwise specified (par. 7.1), preparation for delivery shall conform to normal commercial practice and to the requirements of par. 5.3.

5.2 **Labelling** — In addition to the labelling requirements of any relevant acts or regulations, each container shall be suitably labelled to show the following information:

Name of material

Standard number: CAN/CGSB-1.165-2004

Manufacturer's name and address

Manufacturer's batch number

Manufacturer's code number

Instructions for use:

— Mixing: To one container of resin component, add one container of curing agent. Use the mixed material within 8 h.

— Induction time: as specified by the manufacturer.

— Thinning: according to the manufacturer's instructions.

— Application conditions: temperature and humidity conditions to be specified by the manufacturer (par. 7.2.5).

Cautionary notes:

— Contact with the skin should be avoided.

— The material should be used under adequately ventilated conditions.

— The material should be kept between 5 and 40°C.

— The material is flammable and should be kept away from sparks and open flames.

5.3 The supplier is required to fill the containers so that the total contents of one container of the resin component when mixed with the total contents of one container of the curing agent shall constitute one unit. Unless otherwise specified (par. 7.1), the resin component and curing agent containers shall be packed in one carton.

5. INSPECTION

5.1 **Sampling** — Sampling shall be carried out in accordance with CGSB standard 1-GP-71, Method 1.1.

5.2 Testing

5.2.1 Panel Preparation

5.2.1.1 In testing for the requirements of par. 4.5 and 4.8, the drying times specified in the test methods shall be disregarded, and all films shall cure for 7 d under standard conditions (CGSB 1-GP-71, Method 103.1).

5.2.1.2 Prepare the panels as follows:

Type of Panel	Panel Pretreatment	Dry film Thickness
	CGSB 1-GP-71	µm
Aluminum	Method 99.2	35 ± 5
Steel	Method 100.1	35 ± 5

7. NOTES

7.1 **Option** — The following option must be specified in the application of this standard:

- a. Preparation for delivery if other than as specified (par. 5.1 and 5.3).

7.2 Methods of Application

7.2.1 All surfaces should be clean, dry, and free from oil, grease and corrosion products.

7.2.2 Where optimum chemical resistance is required, steel and iron surfaces should be blast cleaned to white metal SSPC-SP5/NACE No. 1. Surfaces intended for use in an aggressive environment should be blast cleaned in accordance with SSPC-SP10/NACE No. 10 near-white blast cleaning. For other types of service, commercial blast cleaning SSPC-SP6/NACE No. 3 is recommended as the minimum level of preparation. If blast cleaning is not possible, all rust and other surface contamination should be removed by power tool cleaning to bare metal SSPC-SP11, power tool SSPC-SP3 or hand cleaning SSPC-SP2 methods. Performance is directly impacted by the degree of cleaning and surface preparation.

Power-tool or hand-tool cleaning may be adequate for light industrial or commercial environments. Blast cleaning of non-ferrous surfaces should be done with care to avoid damaging the substrate.

7.2.3 Primer complying with this standard should be used in units, as defined in par. 5.3. Only sufficient material for 8 h use should be prepared.

7.2.4 Epoxy primer should preferably be applied by spray, but may be applied by brush in accordance with the manufacturer's instructions. When it is intended to spray the primer on ferrous metal, the surface should first be blast cleaned. For optimum protection, two coats of primer should be applied to obtain a minimum dry film thickness of 75 µm. When a second coat is required, the second coat should be tinted as outlined in par. 3.1 to ensure that all areas are covered.

7.2.5 This primer should be applied only when the ambient or substrate temperature is between 10 and 35°C and the relative humidity below 80%, as atmospheric conditions affect the curing time, pot-life and appearance

7.2.6 When used for finishing the internal surfaces of fuel storage tanks according to CGSB standard 3-GP-24 and CAN/CGSB-3.25, two coats of primer are recommended (see CAN/CGSB-1.146). It is highly recommended that the manufacturer be consulted as to the appropriateness of this application.

7.2.7 Topcoating of the primer is typically recommended within 16 h to 7 d after application. Refer to the manufacturer for detailed recommendations with respect to specific recoat characteristics. If the "recommended recoat window" is exceeded, the primer film should be given a light sanding before topcoating.

7.2.8 The primer should be applied under conditions of adequate ventilation and hygienic measures to protect the worker's skin and health. Manufacturers instructions should be strictly adhered to.

7.2.9 The primer contains volatile flammable solvents; proper precautions should therefore be taken to eliminate the possibility of sparks or open flame being present during application and while the material is drying.

7.3 Equipment

7.3.1 Natural bristle brushes conforming to CGSB specification 22.1, are recommended since most synthetic materials are attacked by the solvents used in the epoxy primers.

7.3.2 Care should be taken to clean equipment thoroughly at regular intervals and immediately after use with thinner supplied by the manufacturer or epoxy thinner. For brushes, cleaning with solvents should be followed by a soap and water rinse, since the epoxy coating will cure even though immersed in solvents.

7.4 Related Publications

7.4.1 Canadian General Standards Board (CGSB)

3-GP-24 — High-Flash Type Aviation Turbine Fuel

CAN/CGSB-3.25 — Aviation Gasoline (Grades 80, 100 and 100LL)

22.1 — Flat Hog-Bristle Brushes, for Paint, Varnish, Enamel and Lacquer.

7.4.2 Society for Protective Coatings (SSPC)

SSPC-SP2 — Hand Tool Cleaning

SSPC-SP3 — Power Tool Cleaning.

7.4.3 Society for Protective Coatings (SSPC)/NACE International

SSPC-SP5/NACE No. 1 — White Metal Blast Cleaning

SSPC-SP6/NACE No. 3 — Commercial Blast Cleaning

SSPC-SP10/NACE No. 2 — Near-White Blast Cleaning

SSPC-SP11 — Power Tool Cleaning To Bare Metal.

7.5 Sources of Referenced Publications

The following addresses were valid at the date of publication.

7.5.1 The publications referred to in par. 2.1.1 and 7.4.1 may be obtained from the Canadian General Standards Board, Sales Centre, Gatineau, Canada K1A 1G6. Telephone (819) 956-0425 or 1-800-665-2472. Fax (819) 956-5644. E-mail ncr.cgsb-ongc@pwgsc.gc.ca. Web site www.ongc-cgsb.gc.ca.

7.5.2 The publications referred to in par. 2.1.2 may be obtained from Health Canada, Consumer Product Safety Bureau, MacDonald Building, 4th floor, 123 Slater Street, Ottawa, Ontario, K1A 0K9. Telephone (613) 954-0104. Fax (613) 952-1994. Web site www.hc-sc.gc.ca.

7.5.3 The publications referred to in par. 2.1.3 may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959, U.S.A., telephone (610) 832-9585, fax (610) 832-9555, Web site www.astm.org or from IHS Canada, 1 Antares Drive, Suite 200, Ottawa, Ontario K2E 8C4, telephone (613) 237-4250 or 1-800-267-8220, fax (613) 237-4251, Web site www.ihs.com.

7.5.3 The publications referred to in par. 7.4.2 and 7.4.3 may be obtained from SSPC, 40 24th Street, 6th floor, Pittsburg, PA 15222-4656. Telephone (412) 281-2331. Fax (412) 281-9995.



Withdrawn/Retirée