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Standards Board Office des normes
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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These CGSB standards and National Standards of Canada are hereby withdrawn due to limited use and support for their revision.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to be referred to for archival purposes only as their content has been repealed as of the date on this withdrawal notice.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 repeinturage 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'amiant
(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)



Canadian
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CAN/CGSB-1.135-99

Supersedes CAN/CGSB-1.135-M91

Flat Alkyd Enamel for Equipment

National Standard of Canada

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.

The responsibility for approving National Standards of Canada rests with the:

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FLAT ALKYD ENAMEL FOR EQUIPMENT

Prepared by the

Canadian General Standards Board



Approved by the

Standards Council of Canada



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CANADIAN GENERAL STANDARDS BOARD

FLAT ALKYD ENAMEL FOR EQUIPMENT

SCOPE

1 This standard applies to an air-drying flat alkyd enamel for use on primed wooden and metal surfaces of equipment, particularly where a glare-free finish is required and where mar resistance is not of prime importance.

2 The enamel can be used as an interior or exterior protective coating on wooden surfaces and ferrous metal surfaces primed with primer conforming to CAN/CGSB-1.81, and on non-ferrous metal surfaces primed with primer conforming to CAN/CGSB-1.212.

3 The enamel may also be used as a finish coat on wooden and metal boxes, and on unprimed wooden slat decks of submarines where a flat finish is required.

4 The testing and evaluation of a product against this standard may require the use of material 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 regulatory requirements prior to its use.

REFERENCED PUBLICATIONS

1 The following publications are referenced in this standard:

1.1 Canadian General Standards Board (CGSB)

CAN/CGSB-1.4 — Petroleum Spirits Thinner

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

CAN/CGSB-1.81 — Air Drying and Baking Alkyd Primer for Vehicles and Equipment

CAN/CGSB-1.212 — Chromate and Lead Free Marine Primer for Steel and Light Alloy Surfaces

CAN/CGSB-8.1 — Sieves, Testing, Woven Wire, Inch Series.

1.2 Health Canada

Hazardous Products (Liquid Coating Materials Regulations) Act.

1.3 American Society for Testing and Materials (ASTM)

D 185 — Standard Test Methods for Coarse Particles in Pigments, Pastes, and Paints

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

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

GENERAL REQUIREMENTS

1 The enamel shall consist of suitable pigments adequately dispersed in a vehicle composed of a medium-length oil-modified alkyd resin, together with the necessary thinners and driers.

2 The enamel is intended primarily for spray application but shall be supplied in a brushing consistency to permit touch-up and painting of small areas. It shall be satisfactory for spraying when reduced with CAN/CGSB-1.4 thinner in accordance with the manufacturer's instructions.

- 3.3 The enamel shall produce a film of uniform flat appearance, free from streaks, bubbles, haze, mottling, wrinkling, floating and coarse particles.
- 3.4 The enamel shall not skin, thicken excessively or cake in the original unopened container for one year from date of shipment when stored at temperatures not exceeding 40°C. At the end of this time, it shall be readily mixed to a uniform condition by stirring and shall meet the requirement for drying time (par. 4.3).
- 3.5 **Colour** — The enamel shall be supplied in the flat colours of U.S. Federal Standard 595B or in an adequately defined commercial colour, as specified (par. 7.1).
- 3.6 **Toxic Elements** — The enamel shall be manufactured in accordance with the requirements of the *Hazardous Products (Liquid Coating Materials Regulations) Act* for designated toxic elements.

4. DETAILED REQUIREMENTS

The enamel shall comply with the following detailed requirements when tested in accordance with the specified test method:

		Test Method			
		Min.	Max.	CGSB 1-GP-71	ASTM
4.1	Flash point, Pensky-Martens closed cup, °C	38	—	3.1	—
4.2	Consistency, Krebs units	65	85	4.5	—
4.3	Drying time, h	5.1	—	—	—
	Tack-free	—	1	—	—
	Dry hard	—	8	—	—
4.4	60° gloss, units	4	8	13.1	—
4.5	Coarse particles, % retained on 45 µm sieve ¹	—	0.5	—	D 185
4.6	Fineness of grind, Hegman	4	—	—	D 1210
4.7	Water content, % by mass	—	0.5	24.1	—
4.8	Hiding power, contrast ratio at 25 µm dry film thickness	—	—	14.7	—
	For yellow, red, orange and white	0.88	—	—	—
	For all other colours	0.98	—	—	—
4.9	Phthalic anhydride, % by mass of NVV	30	37	57.1	—
4.10	Volatile matter, % by mass	—	45	17.1	—
4.11	Rosin and rosin derivatives, % by mass of NVV	—	3	60.2	—
4.12	Oil acids, % by mass of NVV	—	50	63.2	—
4.13	Phenolic resins	—	Nil	75.2	—
4.14	Skinning Properties — The enamel shall be non-skinning when tested in accordance with CGSB standard 1-GP-71, Method 10.1.				
4.15	Accelerated Storage Stability — The enamel shall withstand 96 h heating in a full container at 60°C without caking, gelling, thickening, curdling or seeding, and the change in viscosity shall not be more than 5 Krebs units when tested in accordance with CGSB standard 1-GP-71, Method 30.3. A film prepared from the enamel, so conditioned, shall be uniform in appearance, free from streaking, mottling or seeding, and the change in gloss shall not exceed 5 units.				

¹See CAN/CGSB-8.1.

- 4.16 **Dilution Stability** — The enamel shall remain homogeneous and free from precipitation, curdling or thickening when reduced with CAN/CGSB-1.4 thinner in the volume ratio of four parts enamel to one part thinner and allowed to stand 4 h when tested in accordance with CGSB standard 1-GP-71, Method 45.1.
- 4.17 **Gasoline Resistance** — Panels primed with zinc chromate primer conforming to CAN/CGSB-1.212 and topcoated with the enamel shall withstand 4 h immersion in a 70:30 mixture of isooctane/toluene at 23°C in accordance with CGSB standard 1-GP-71, Method 107.5 without blistering, lifting, wrinkling, loosening or peeling. After a 24 h recovery period, there shall be no evidence of softening or intercoat separation. When subjected to the knife test in accordance with CGSB standard 1-GP-71, Method 135.1, the ribbon produced shall not show intercoat separation, and there shall be no flaking, loosening or intercoat separation in the area adjacent to the scratch.
- 4.18 **Water Resistance** — When examined after a 2 h recovery period, panels primed with primer conforming to CAN/CGSB-1.212, topcoated with the enamel and immersed 24 h in water at 23°C in accordance with CGSB standard 1-GP-71, Method 110.1, shall show no wrinkling, lifting, loosening, peeling or softening, and not more than slight discolouration or blistering. When subjected to the knife test in accordance with CGSB standard 1-GP-71, Method 135.1, the ribbon produced shall be free from intercoat separation, and there shall be no flaking, loosening or intercoat separation in the area adjacent to the scratch.
- 4.19 **Baking Resistance** — When heated 2 h at 105°C and cooled 24 h, the enamel film applied over primer conforming to CAN/CGSB-1.212 shall be hard, tough and smooth, and shall show no checking, cracking, flaking, wrinkling, blistering or more than moderate discolouration when tested in accordance with CGSB standard 1-GP-71, Method 112.4.
- 4.20 **Flexibility** — The dried enamel film shall show no cracking or peeling when subjected to the bending test at 23°C using a 6.4 mm diameter mandrel in accordance with CGSB standard 1-GP-71, Method 119.1. The enamel shall be applied in one coat to give a dry film of $30 \pm 5 \mu\text{m}$ over the specified pretreated aluminum panels (CGSB standard 1-GP-71, Method 99.2) primed with primer conforming to CAN/CGSB-1.212 and allowed to dry 7 d under standard conditions (CGSB standard 1-GP-71, Method 103.1) prior to bending.
- 4.21 **Accelerated Weathering Resistance** — The enamel film applied over primer conforming to CAN/CGSB-1.212 and allowed to dry 7 d shall withstand an exposure period as outlined in par. 6.2. It shall show no evidence of blistering, chalking, checking, cracking, flaking, peeling or more than moderate discolouration.
- 4.22 **Behaviour Towards Undercoats and Self-Lifting** — Two coats of enamel applied over primer conforming to CAN/CGSB-1.212 with intervals of 2, 6 and 18 h between coats shall show no lifting of either the primer or the first coat of enamel when tested in accordance with CGSB standard 1-GP-71, Method 133.1.
- 4.23 **Adhesion** — Panels applied with primer conforming to CAN/CGSB-1.212, topcoated with the enamel and subjected to the knife test shall produce a ribbon free from crumbling and intercoat separation. There shall be no flaking, loosening or intercoat separation in the area adjacent to the scratch when tested in accordance with CGSB standard 1-GP-71, Method 135.6. When subjected to the tape test, there shall be no separation of topcoats from the primer or of the primer from the metal.

5. PREPARATION FOR DELIVERY

- 5.1 Unless otherwise specified (par. 7.1), preparation for delivery shall conform to normal commercial practice.

- 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-1.135-99

Colour

Manufacturer's name and address

Manufacturer's batch number

Manufacturer's code number

Date of manufacture

Instructions for use:

— Thinning for spraying using thinner conforming to CAN/CGSB-1.4.

6. INSPECTION

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

6.2 Testing

6.2.1 **Accelerated Weathering Resistance** — Apply (CGSB standard 1-GP-71, Method 98.4) one coat of the specified primer to clean steel panels (CGSB standard 1-GP-71, Method 100.1) and dry for the specified time (CGSB standard 1-GP-71, Method 98.4). Apply (CGSB standard 1-GP-71, Method 98.4) one coat of the enamel under test. Conduct the test in accordance with ASTM D 4587 using UVA 340 lamps. The operating cycle shall be 4 h UV at 60°C followed by 4 h condensation at 50°C, continuously for 15 d.

7. NOTES

7.1 **Options** — The following options must be specified in the application of this standard:

- a. Colour of enamel (par. 3.5)
- b. Preparation for delivery, if other than as specified (par. 5.1).

7.2 Sources of Referenced Publications

- 7.2.1 The publications referred to in par. 2.1.1 may be obtained from the Canadian General Standards Board Sales Centre, Ottawa, Canada K1A 1G6. Telephone (819) 956-0425 or 1-800-665-CGSB (Canada only) Fax (819) 956-5644.
- 7.2.2 The publication referred to in par. 2.1.2 may be obtained from Health Canada, Product Safety Bureau, Jeanne Mance Building, 12th floor, Tunney's Pasture, Ottawa, Ontario K1A 0K9. Telephone (613) 957-4467. Fax (613) 952-3039.
- 7.2.3 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., or from the Global Info Centre Canada, 240 Catherine Street, Suite 305, Ottawa, Ontario K2P 2G8. Telephone (613) 237-4250 or 1-800-854-7179. Fax (613) 237-4251.
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