SINGAPORE STANDARD

Specification for solvent-based gloss enamel paint





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The content of this Singapore Standard was approved on 25 March 2021 by the Chemical Standards Committee (CSC) under the purview of the Singapore Standards Council.

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Foreword

This Singapore Standard was prepared by the Technical Committee on Surface Coatings under the purview of CSC.

This standard is a revision of SS 7: 1998. The key changes in the revised edition are as follows:

- a) Added Clause 2 on Normative references;
- b) Replaced withdrawn test methods such as SS 5 Part D3, SS 5 Part G9 and SS 269;
- c) Reduced lead content requirement;
- d) Replaced hard-drying time requirement with through-dry time requirement;
- e) Replaced test methods of hard-drying time, fastness to light and accelerated weathering.

In preparing this standard, reference was made to "Federal Specification TT-E-491C: 1977 "Enamel: gloss, synthetic (for metal and wood, hospital furniture)". Acknowledgement is made for the use of information from the above publication.

This standard is expected to be used by include paint manufacturers, suppliers, test laboratories, contractors, applicators, architectural associations, consultants, facilities/property managers, land surveyors and related government agencies.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

- Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions. Where SSs are deemed to be stable, i.e. no foreseeable changes in them, they will be classified as "Mature Standards". Mature Standards will not be subject to further review, unless there are requests to review such standards.
- 2. An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore and the Singapore Standards Council shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR. Although care has been taken to draft this standard, users are also advised to ensure that they apply the information after due diligence.
- 3. Compliance with a SS or TR does not exempt users from any legal obligations.

Specification for solvent-based gloss enamel paint

1 Scope

This specification applies to an air-drying gloss paint for use on primed interior and exterior wood and metal surfaces.

2 Normative references

The following referenced documents are indispensable for the application of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 4800 Schedule of paints colours for building purposes

Methods of test for paints, varnishes and related materials SS₅

Part A1: Sampling

Part A2: Examination and preparation of samples for testing

Part B2: Determination of non-volatile matter content

Part B3: Determination of water by the Dean and Stark method

Part B4: Condition in container

Part B5: Skinning (partially filled container)

Part B6 : Storage stability (filled container)

Part B7: Density

Part B8: Reducibility and dilution stability

Part B9: Brushing properties

Part B10: Spraying properties

Part B12: Consistency of paints using the Stormer viscometer

Part B13: Fineness of grind

Part B15: Determination of flash point - Closed cup equilibrium method

Part C6: Determination of low concentrations of lead, cadmium and cobalt in

paint by atomic absorption spectroscopy

Part D1: Wet edge time

Part D2 : Surface drying time (ballotini method)

Part D5: Determination of through-dry state and through-dry time

Part E1: Determination of gloss value at 20°, 60° and 85°

Part E2: Determination of contrast ratio (opacity) of light-coloured paints at a

fixed spreading rate

Part E3: Visual comparison of the colours of paints

Part F1: Bend test (cylindrical mandrel)

Part F2: Scratch test

Part G11 : 2021 Methods of exposure to laboratory light sources — General

guidance

Part G12 : 2021 Methods of exposure to laboratory light sources — Xenon-arc

lamps

SS 88 Minerals solvents (white spirit and related hydrocarbon solvents) for paints and

other purposes