

Specification for

Undercoat and finishing paints

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Surface Treatment and Coatings Standards Policy Committee (STC/-) to Technical Committee STC/28, upon which the following bodies were represented:

- British Cement Association
- British Coatings Federation Ltd.
- British Decorators' Association
- British Railways Board
- Consumer Policy Committee of BSI
- Department of Education
- Department of the Environment (Property Services Agency)
- Department of the Environment (Building Research Establishment)
- European Resin Manufacturers' Association
- Ministry of Defence
- Oil and Colour Chemists' Association
- Paint Research Association
- Society of Chemical Industry
- Titanium Pigment Manufacturers' Technical Committee

This British Standard, having been prepared under the direction of the Surface Treatment and Coatings Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 October 1993

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Foreword

This British Standard has been prepared under the direction of the Surface Treatments and Coatings Standards Policy Committee.

It is intended that this standard should encompass those materials that are widely available at the date of its publication, e.g. systems based on mineral spirit reducible alkyd resins, suitable for both interior and exterior applications. The composition is however not specified and it is possible that advances in technology may produce water-borne coating systems that can meet the requirements of this British Standard.

Paints conforming to this standard are considered capable of application satisfactorily under all reasonable climatic conditions, i.e. when the ambient temperature is between 5 °C and 30 °C and the relative humidity is not greater than 85 % r.h.

In general the test procedures have been aligned, wherever possible, with those specified in the BS 3900 series. This has however not been possible for the following tests.

a) *Artificial weathering*. This test is based on ASTM method G53 using type UVA 351 fluorescent tubes. The test is carried out on a three-coat system using a stable substrate (acid chromate pickled hard aluminium).

As the colour range of materials covered by this British Standard is potentially very large, it has not been possible to specify a maximum colour change for every finishing coat colour. A range of 18 colours, together with black and white, has therefore been selected to cover the range of coloured pigments likely to be required in both full strength and reduced strength applications (see clause 4). The maximum colour change, minimum gloss level and the freedom from chalking after 16 weeks artificial weathering for this limited range of colours is specified.

b) *Natural weathering*. This test is based on the NORD TEST Standard NT Build 229:1989, the test being carried out on a three-coat system using a primer conforming to either BS 5082:1993 or BS 5358:1993 on a relatively unstable substrate for a period of 12 months. Limits for cracking, blistering, flaking, adhesion and mould growth are specified.

c) *Opacity (contrast ratio)*. This test is broadly in line with BS 3900-D6:1982 except that sealed black and white card is used as the substrate, the opacity being determined and the minimum value specified for a two-coat system.

d) *Yellowing test*. This test determines the maximum instrumental colour difference occurring after storage of painted panels in complete darkness for a specified time.

It has been assumed in the drafting of this specification that it will be used and applied by persons who are appropriately qualified and experienced.

WARNING. This British Standard calls for the use of substances and/or procedures that may be injurious to health if adequate precautions are not taken. This standard refers only to technical suitability and in no way absolves either the designer, the producer, the supplier or the user from statutory obligations relating to health and safety at any stage of manufacture or use.

Particular attention is drawn to the hazards associated with *o*-anisidine which is classified as very toxic by inhalation, in contact with the skin and if swallowed; it is also classified as a category 3 carcinogen.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing product surveillance which may be coupled with assessment of a supplier's quality systems against the appropriate Part of BS 5750.

Enquiries on the availability of third party certification schemes are forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching a body from the list of Association Members.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 8, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.