

Specification for

Zinc phosphate pigments for paints

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Pigments, Paints and Varnishes Standards Policy Committee (PVC/-) to Technical Committee PVC/1, upon which the following bodies were represented:

- Aluminium Powder and Paste Association
- British Cement Association
- British Railways Board
- Chemical Industries' Association
- Oil and Colour Chemists Association
- Paintmakers Association of Great Britain Ltd.
- Titanium Pigment Manufacturers Technical Committee
- Zinc Development Association

This British Standard, having been prepared under the direction of the Pigments, Paints and Varnishes Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 30 April 1991

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The following BSI references relate to the work on this standard:
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National foreword

This British Standard has been prepared under the direction of the Pigments, Paints and Varnishes Standards Policy Committee. It is identical with ISO 6745:1990 “*Zinc phosphate pigments for paints — Specifications and methods of test*”, published by the International Organization for Standardization (ISO). It supersedes BS 5193:1975, which is withdrawn.

In the first edition of this standard, only one type of product was specified. In this revision, three types are specified, of which type 1 corresponds to the zinc phosphate dihydrate pigment specified in the first edition. The type 3 pigment corresponds to zinc phosphate tetrahydrate, while the type 2 pigment corresponds to mixtures of the other two types. In specifying products for compliance with this standard, users should stipulate the particular type by stating the number and date of this British Standard and the type in the form BS 5193-1:1991 or BS 5193-2:1991 or BS 5193-3:1991.

Except for the degree of hydration, the requirements for the three types are identical, but there are some differences from those specified in the first edition of this standard. The minimum resistivity of the aqueous extract has been reduced to compensate for a change in the pigment dispersion concentration, and evidence has been presented to show that this minimum resistivity satisfactorily restricts the content of chloride and sulphate ions. The maximum permissible residue on sieve has been increased because a sieve of 63 μm mesh aperture size has been replaced by one of 45 μm . Limits on the permissible density have been introduced as a replacement for an unspecified agreed tamped volume.

Cross-references

International Standard	Corresponding British Standard
ISO 787-5:1980	BS 3483 <i>Methods for testing pigments for paints</i> Part B7:1982 <i>Determination of oil absorption value</i> (Identical)
ISO 787-7:1981	Part B3:1982 <i>Determination of residue on sieve</i> (water method, using a manual procedure) (Identical)
ISO 787-9:1981	Part C4:1982 <i>Determination of pH value of an aqueous suspension</i> (Identical)
ISO 787-14:1973	Part C5:1974 <i>Determination of resistivity of aqueous extract</i> (Technically equivalent)
ISO 842:1984	BS 4726:1986 <i>Methods for sampling raw materials for paints and varnishes</i> (Identical)
ISO 3696:1987	BS 3978:1987 <i>Specification for water for laboratory use</i> (Identical)
ISO 4793:1980	BS 1752:1983 <i>Specification for laboratory sintered or fritted filters including porosity grading</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 385-1:1984, ISO 648:1977 and ISO 787-10:1981, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard. ISO 385-1:1984 is related to BS 846:1985, ISO 648:1977 is related to BS 1583:1986, and ISO 787-10:1981 is related to BS 3483-B8:1982.

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 6, 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.