

Methods of test for paints

Part B4: Determination of total lead in paints and similar materials —

[ISO title: Paints and varnishes —
Determination of total lead — Flame
atomic absorption spectrometric
method]

It is recommended that this Part be read in conjunction with the general information in the Introduction to BS 3900, issued separately.

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This British Standard, having been prepared under the direction of the Pigments, Paints and Varnishes Standards Committee, was published under the authority of the Board of BSI and comes into effect on 31 January 1986

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The committees responsible for this British Standard are shown in BS 3900: Introduction.

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

This revision of this Part of BS 3900 has been prepared under the direction of the Pigments, Paints and Varnishes Standards Committee. It is identical with ISO 6503:1984 *“Paints and varnishes — Determination of total lead — Flame atomic absorption spectrometric method”* published by the International Organization for Standardization (ISO). This Part of BS 3900 supersedes BS 3900-B4:1967, which is withdrawn.

This revision of this Part of BS 3900 has been prepared principally to replace method 1 of the previous edition by a method using modern procedures, which are more rapid and have improved precision. Method 2 of the 1967 edition has not been included, although the Technical Committee is considering an alternative method to this which, if approved, will be introduced in due course.

BS 3900-B4 is not appropriate for determining the “soluble” lead content of paints. For this purpose, reference should be made to the method described in BS 3900-B3 “Determination of “soluble” lead in the solid matter in liquid paints: method for use in conjunction with The Control of Lead at Work Regulations, 1980 (S.I. 1980 No. 1248)”.

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

Terminology and conventions. The text of the international standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this standard they should be read as “British Standard” and wherever the identification “ISO 6503” appears, it should be read as “BS 3900-B4”.

In British Standards, it is current practice to use the symbol “L” for litre (and its submultiples) rather than “l”, and to use the spelling “sulphur”, etc., instead of “sulfur”, etc.

Cross-references

International standard	Corresponding British Standard
ISO 1042:1983	BS 1792:1982 Specification for one-mark volumetric flasks (Identical) BS 3900 Methods of test for paints
ISO 1512:1974	Part A1:1970 Sampling (Technically equivalent)
ISO 1513:1980	Part A2:1983 Examination and preparation of samples for testing (Identical)
ISO 5725:1981	BS 5497 Precision of test methods Part 1:1979 Guide for the determination of repeatability and reproducibility for a standard test method (Technically equivalent)

The Technical Committee has reviewed the provisions of ISO 385/1 which has now been published as a partial revision of ISO/R 385:1964, and has decided that they are acceptable for use in conjunction with this standard. A related British Standard to ISO 385/1:1984 is BS 846:1985 “Specification for burettes”.

There are no British Standards corresponding to ISO 3696, currently at draft stage, or ISO 3856/1. The Technical Committee has reviewed the requirements for the water of grade 3 purity, proposed for inclusion in ISO 3696. As these are compatible with the requirements of BS 3978:1966 “Water for laboratory use”, the Technical Committee has decided that water complying with BS 3978 is acceptable for use as required in 4.2 and 5.2. It is expected that ISO 3856/1 which is only referred to in clause 1 for information will be implemented in group B of BS 3900.

Additional information. With reference to 4.5.1, the full procedure requires both the addition of liquid paraffin, as described in 4.5.2 paragraph 3, and the extraction described in 4.5.4.2.

The single test results referred to in 7.2.1 and 7.2.2 are mean values obtained in 7.1 for the two test portions (see 4.5.2 or 5.5.1).

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.