



BSI Standards Publication

Methods of test for paints –

Part 0: Index of test methods

bsi.

...making excellence a habit.TM

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© BSI 2010

ISBN 978 0 580 64646 1

ICS 87.040

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

Committee reference STI/10

Draft for comment 09/30190473 DC

Publication history

First published June 1966

First revision, March 1969

Second revision, February 1989

Third revision, May 2010

Amendments issued since publication

Date	Text affected
------	---------------

Contents

Foreword	<i>ii</i>
1 Scope	1
2 Content and usage of BS 3900-0	1
3 Using the tables	1
Bibliography	20
List of tables	
Table 1 – Tests on liquid paints (excluding chemical tests)	2
Table 2 – Tests involving chemical examination of liquid paints and dried paint films	5
Table 3 – Tests associated with paint film formation	7
Table 4 – Optical tests on paint films	8
Table 5 – Mechanical tests on applied coatings	9
Table 6 – Durability and environmental tests on paint films	12
Table 7 – Evaluation of paint and varnish defects	15
Table 8 – Testing of coating powders	16
Table 9 – Tests for release of biocides from antifouling paints	18
Table 10 – Electrochemical methods	19
Table 11 – Miscellaneous	19

Summary of pages

Summary of pages
This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 20, an inside back cover and a back cover.

Foreword

Publishing information

This part of BS 3900 is published by BSI and came into effect on 31 May 2010. It was prepared by Technical Committee STI/10, *Test methods for paints*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 3900 supersedes BS 3900-0:1989+A1:1992, which is withdrawn.

Relationship with other publications

Standards for testing paints and varnishes are published under many different identifiers (standards numbers). Many of these are derived from the identifier of the corresponding international standard (e.g. BS EN ISO 9514) while others remain in the BS 3900 series (e.g. BS 3900-A5). Most of these standards are listed in this document. For the latest publication information, users are advised to consult BSI.

Information about this document

This is a full revision of the standard and introduces the following principal changes:

- a) Test procedures and conditions are now described in other standards, so they have been removed.
 - b) Tables listing the standards, with current and previous identifiers, have been inserted.

Presentational conventions

Details of the structure, layout and presentational conventions used in BS 3900-0 are given in Clause 3.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This part of BS 3900 tabulates the standards available for testing paints and varnishes. It contains no test methods.

2 Content and usage of BS 3900-0

BS 3900-0 provides tables which detail standards relating to methods for testing paints and allied materials, including methods for evaluating performance.

NOTE Attention is drawn to the fact that new standards could be added to this series, usually implementing corresponding ISO methods. This standard does not list all methods of test for paints. Attention is also drawn to the methods given in BS 3483, BS 3962 and BS 6782.

3 Using the tables

Each table contains four columns with the following headings:

- a) *Current identifier*: this is the primary identifier of the current edition of the standard at the time this edition of BS 3900-0 was published.
 - b) *Previous identifier*: this is usually the reference in the BS 3900 series that appears as a secondary identifier on the current edition (in bold) or that appears on the most recent edition bearing a BS 3900 designation (in roman type). In the latter case, if the BS 3900 designation is in parentheses, that standard is partially replaced by the current standard or the current standard has a wider scope.
 - c) *Other references*: this includes the reference of the committee responsible for the standard (if other than STI/10), the ISO identifier for dual-numbered standards for which the BS 3900 designation is the primary identifier (in bold), and references of previous CEN or ISO standards if the number in the identifier has changed (in roman type).
 - d) *Title*: this is the title of the identified standard.

Any text in square brackets actually appears as part of the title page of the standard, either following the BS title or with the identifier.

Table 1 Tests on liquid paints (excluding chemical tests)

Current identifier	Previous identifier	Other references	Title
BS 3900-A5:1991	—	—	Methods of test for paints – Part A5: Large-scale brushing tests for paints and varnishes
BS 3900-A8:1986	—	BS 6664-1:1986 ISO 1516:1981 [Danger class: closed cup] (PTI/13)	Methods of test for paints – Part A8: Test for flash/no flash (closed cup equilibrium method) Flashpoint of petroleum and related products – Part 1: Method of test for flash/no flash (closed cup equilibrium method) [ISO title: Paints, varnishes, petroleum and related products – Flash/no flash test – Closed cup equilibrium method]
BS 3900-A9:1986	—	BS 6664-2:1986 ISO 1523:1983 [Flashpoint: closed cup] PTI/13	Methods of test for paints – Part A9: Determination of flashpoint (closed cup equilibrium method) Flashpoint of petroleum and related products – Part 2: Method for determination of flashpoint (closed cup equilibrium method) [ISO title: Paints, varnishes, petroleum and related products – Determination of flashpoint – Closed cup equilibrium method]
BS 3900-A10:1998	—	ISO 3233:1998	Methods of test for paints – Part A10: Determination of percentage volume of non-volatile matter by measurement of the density of a dried coating
BS 3900-A11:1974 /[Combustibility]	—	—	Methods of test for paints – Part A11: Small scale test for combustibility
BS 3900-A16:1986	—	ISO 7254:1984	Methods of test for paints – Part A16: Determination of natural spreading rate by brush application [ISO title: Paints and varnishes – Assessment of natural spreading rate – Brush application]
BS 3900-A17:1986	—	ISO 7877:1984	Methods of test for paints – Part A17: Coating of test panels at a specified spreading rate [ISO title: Paints and varnishes – Coating of test panels at a specified spreading rate – Brush application]
BS EN ISO 1513:1995+A1:1995 ^{A)}	BS 3900-A2:1993	—	Paints and varnishes – Examination and preparation of samples for testing
BS EN ISO 1524:2002	BS 3900-C6:2000 +A1:2003 (renumbers the BS as BS EN ISO 1524:2002)	—	Paints, varnishes and printing inks – Determination of fineness of grind
BS EN ISO 2431:1996	BS 3900-A6:1996	—	Paints and varnishes – Determination of flow time by use of flow cups

Table 1 Tests on liquid paints (excluding chemical tests) (continued)

Current identifier	Previous identifier	Other references	Title
BS EN ISO 2811-1:2001^{A)}	BS 3900-A19:1998 +A1:2001 (renumbers the BS as BS EN ISO 2811-1:2001)	—	Paints and varnishes – Determination of density – Part 1: Pyknometer method
BS EN ISO 2811-2:2001^{A)}	BS 3900-A20:1998 +A1:2001 (renumbers the BS as BS EN ISO 2811-2:2001)	—	Paints and varnishes – Determination of density – Part 2: Immersed body (plummet) method
BS EN ISO 2811-3:2001^{A)}	BS 3900-A21:1998 +A1:2001 (renumbers the BS as BS EN ISO 2811-3:2001)	—	Paints and varnishes – Determination of density – Part 3: Oscillation method
BS EN ISO 2811-4:2001^{A)}	BS 3900-A22:1998 +A1:2001 (renumbers the BS as BS EN ISO 2811-4:2001)	—	Paints and varnishes – Determination of density – Part 4: Pressure cup method
BS EN ISO 2884-1:2006	BS 3900-A7-1:2006 +A1:2007 (renumbers the BS as BS EN ISO 2884-1:2006)	—	Paints and varnishes – Determination of viscosity using rotary viscometers – Part 1: Cone-and-plate viscometer operated at a high rate of shear
BS EN ISO 2884-2:2006	BS 3900-A7-2:2003 +A1:2007 (renumbers the BS as BS EN ISO 2884-2:2006)	—	Paints and varnishes – Determination of viscosity using rotary viscometers – Part 2: Disc or ball viscometer operated at a specified speed
BS EN ISO 3251:2008	BS 3900-B18:2003	ST/3	Paints, varnishes and plastics – Determination of non-volatile-matter content
BS EN ISO 3680:2004	BS 3900-A13:1986	BS 2000-524:2004 PTI/13	Methods of test for petroleum and its products – BS 2000-524: Determination of flash/no flash – Rapid equilibrium closed cup method (Identical with IP 524-2005)
BS EN ISO 9038:2003	BS ISO 9038:2002 +A1:2004 (renumbers the BS ISO as BS EN ISO 9038:2003)	—	Test for sustained combustibility of liquids
BS EN ISO 9514:2005	BS 3900-A18:1993	—	Paints and varnishes – Determination of the pot life of multicomponent coating systems – Preparation and conditioning of samples and guidelines for testing
BS EN ISO 11890-1:2007	BS 3900-A23:2000 +A1:2001	—	Paints and varnishes – Determination of volatile organic compound (VOC) content – Part 1: Difference method (ISO 11890-1:2007)

Table 1 Tests on liquid paints (excluding chemical tests) (continued)

4 • © BSI 2010

Current identifier	Previous identifier	Other references	Title
BS EN ISO 11890-2:2006	BS 3900-A24:2000 +A1:2001	—	Paints and varnishes – Determination of volatile organic compound (VOC) content – Part 2: Gas-chromatographic method
BS EN ISO 14680-1:2006	BS 3900-A26:2006 +A1:2007 (renumbers the BS as BS EN ISO 14680-1:2006)	—	Paints and varnishes – Determination of pigment content – Part 1: Centrifuge method
BS EN ISO 14680-2:2006	BS 3900-A27:2006 +A1:2007 (renumbers the BS as BS EN ISO 14680-2:2006)	—	Paints and varnishes – Determination of pigment content – Part 2: Ashing method
BS EN ISO 14680-3:2006	BS 3900-A28:2000 +A1:2007 (renumbers the BS as BS EN ISO 14680-3:2006)	—	Paints and varnishes – Determination of pigment content – Part 3: Filtration method
BS EN ISO 15528:2000	BS EN 21512:1994, BS 3900-A1:1992, ISO 1512:1991	—	Paints, varnishes and raw materials for paints and varnishes – Sampling
BS EN ISO 17895:2005	—	—	Paints and varnishes – Determination of the volatile organic compound content of low-VOC emulsion paints (in-can VOC)
BS EN ISO 23811:2009			Paints and varnishes – Determination of percentage volume of non-volatile matter by measuring the non-volatile matter content and the density of the coating material, and calculation of the theoretical spreading rate (ISO 23811:2009)

Table 2 Tests involving chemical examination of liquid paints and dried paint films

Current identifier	Previous identifier	Other references	Title
BS 3900-B3:1983 ["Soluble" lead to S.I. 1980 No. 1248]	—	—	Methods of test for paints – Part 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)
BS 3900-B4:1986	—	ISO 6503:1984 [Total lead]	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]
BS 3900-B5:1986	—	ISO 6713:1984 [Acid extraction]	Methods of test for paints – Part B5: Preparation of acid extracts from liquid paints or coating powders [ISO title: Paints and varnishes – Preparation of acid extracts from paints in liquid or powder form]
BS 3900-B6:1986	—	ISO 3856-1:1984	Methods of test for paints – Part B6: Determination of "soluble" lead content [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 1: Determination of lead content – Flame atomic absorption spectrometric method and dithizone spectrophotometric method]
BS 3900-B7:1986	—	ISO 3856-2:1984	Methods of test for paints – Part B7: Determination of "soluble" antimony content [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 2: Determination of antimony content – Flame atomic absorption spectrometric method and Rhodamine B spectrophotometric method]
BS 3900-B8:1986	—	ISO 3856-3:1984	Methods of test for paints – Part B8: Determination of "soluble" barium content [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 3: Determination of barium content – Flame atomic emission spectrometric method]
BS 3900-B9:1986	—	ISO 3856-4:1984	Methods of test for paints – Part B9: Determination of "soluble" cadmium content [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 4: Determination of cadmium content – Flame atomic absorption spectrometric method and polarographic method]
BS 3900-B10:1986	—	ISO 3856-5:1984	Methods of test for paints – Part B10: Determination of hexavalent chromium content of solid matter [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 5: Determination of hexavalent chromium content of the pigment portion of the liquid paint or the paint in powder form – Diphenylcarbazide spectrophotometric method]

Table 2 Tests involving chemical examination of liquid paints and dried paint films (continued)

Current identifier	Previous identifier	Other references	Title
BS 3900-B11:1986	—	ISO 3856-6:1984 [Chromium in paint liquid]	Methods of test for paints – Part B11: Determination of total chromium content of liquid matter [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 6: Determination of total chromium content of the liquid portion of the paint – Flame atomic absorption spectrometric method]
BS 3900-B12:1986	—	ISO 3856-7:1984	Methods of test for paints – Part B12: Determination of "soluble" mercury content [ISO title: Paints and varnishes – Determination of "soluble" metal content – Part 7: Determination of mercury content of the pigment portion of the paint and of the liquid portion of water-dilutable paints – Flameless atomic absorption spectrometric method]
BS 3900-B15:1987	—	—	Methods of test for paints – Part B15: Rapid method for estimation of lead in liquid paints
BS 3900-B16:1990	—	ISO 7252:1984	Methods of test for paints – Part B16: Determination of total mercury

Table 3 Tests associated with paint film formation

Current identifier	Previous identifier	Other references	Title
BS 3900-C1:1965+A2:1991	—	—	Methods of test for paints – Part C1: Wet edge time
BS 3900-C9:1982	—	ISO 4627:1981 [Compatibility]	Methods of test for paints – Part C9: Methods for evaluation of the compatibility of a product with a surface to be painted [ISO title: Paints and varnishes – Evaluation of the compatibility of a product with a surface to be painted – Methods of test]
BS EN ISO 2808:2007	BS 3900-C5:2007	—	Paints and varnishes – Determination of film thickness
BS EN ISO 9117-1:2009	BS 3900-C3:1990	BS EN 29117:1992 ISO 9117:1990	Paints and varnishes – Drying tests – Part 1: Determination of thorough-dry state and thorough-dry time
BS EN ISO 9117-2:2010	BS 3900-C7:1993	—	Paints and varnishes – Drying tests – Part 2: Pressure test for stackability (ISO 9117-2:2010)
BS EN ISO 9117-3:2010	BS 3900-C2:1994	—	Paints and varnishes – Drying tests – Part 3: Surface-drying test using ballotini (ISO 9117-3:2010)
BS EN ISO 3678:1995^{A)}	BS 3900-C8:1978	—	Paints and varnishes – Print-free test
BS EN ISO 16862:2006	BS ISO 16862:2003 (renumerates the BS as BS EN ISO 16862:2006)	—	Paints and varnishes – Evaluation of sag resistance
BS EN ISO 28199-1:2009	—	—	Paints and varnishes – Evaluation of properties of coating systems related to the application process – Part 1: Relevant vocabulary and preparation of test panels (ISO 28199-1:2009)
BS EN ISO 28199-2:2009	—	—	Paints and varnishes – Evaluation of properties of coating systems related to the application process – Part 2: Colour stability, process hiding power, re-dissolving, overspray, absorption, wetting, surface texture and mottling (ISO 28199-2:2009)
BS EN ISO 28199-3:2009	—	—	Paints and varnishes – Evaluation of properties of coating systems related to the application process – Part 3: Visual assessment of sagging, formation of bubbles, pinholing and hiding power (ISO 28199-3:2009)

^{A)} To be incorporated in the BS EN ISO 9117 series.

8 Table 4 Optical tests on paint films

• © BSI 2010

Current identifier	Previous identifier	Other references	Title
BS 3900-D6:1982	—	ISO 3906:1980 (including Amendment No. 1) [Opacity of light-coloured paints]	Methods of test for paints – Part D6: Determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate, using polyester film [ISO title: Paints and varnishes – Determination of contrast ratio (opacity) of light-coloured paints at a fixed spreading rate (using polyester film)]
BS 3900-D8:1986	—	ISO 7724-1:1984	Methods of test for paints – Part D8: Determination of colour and colour difference: Principles [ISO title: Paints and varnishes – Colorimetry – Part 1: Principles]
BS 3900-D9:1986	—	ISO 7724-2:1984 (Colour-measurement)	Methods of test for paints – Part D9: Determination of colour and colour difference: Measurement [ISO title: Paints and varnishes – Colorimetry – Part 2: Colour measurement]
BS 3900-D10:1986	—	ISO 7724-3:1984	Methods of test for paints – Part D10: Determination of colour and colour difference: Calculation [ISO title: Paints and varnishes – Colorimetry – Part 3: Calculation of colour difference]
BS EN ISO 2813:2000	BS 3900-D5:1997 +A1:2000 (renumbers the BS as BS EN ISO 2813:2000)	—	Paints and varnishes – Determination of specular gloss of non-metallic paint films at 20°, 60° and 85°
BS EN ISO 2814:2006	BS 3900-D4:2006	—	Paints and varnishes – Comparison of contrast ratio (hiding power) of paints of the same type and colour
BS EN ISO 3668:2001	BS 3900-D1:1998 +A1:2001 (renumbers the BS as BS EN ISO 3668:2001)	—	Paints and varnishes – Visual comparison of the colour of paints
BS EN ISO 6504-1:2006	BS 3900-D7:1983 +A1:2007 (renumbers the BS as BS EN ISO 6504-1:2006)	—	Paints and varnishes – Determination of hiding power – Part 1: Kubelka-Munk method for white and light-coloured paints
BS EN ISO 6504-3:2007	BS 3900-D11:2007	—	Paints and varnishes – Determination of hiding power – Part 3: Determination of contrast ratio of light-coloured paints at a fixed spreading rate
BS EN ISO 13803:2004	BS 3900-D13:2000 +A1:2004 (renumbers the BS as BS EN ISO 13803:2004)	—	Paints and varnishes – Determination of reflection haze on paint films at 20 degrees

Table 5 Mechanical tests on applied coatings

Current identifier	Previous identifier	Other references	Title
BS 3900-E3:1973 +A1:1992 [Falling ball impact]	—	Partially replaced by BS EN ISO 6272:1994 BS 3900-E13:1993	Methods of test for paints – Part E3: Impact (falling weight) resistance
BS 3900-E7:1974 +A2:1992 [Falling ball impact]	—	—	Methods of test for paints – Part E7: Resistance to impact (falling ball test)
BS 3900-E8:1974 [Pendulum impact]	—	—	Methods of test for paints – Part E8: Resistance to impact (pendulum test)
BS 3900-E12.1:2000	—	ISO 6441-1:1999	Methods of test for paints – Part E12.1: Determination of Knoop hardness by measurement of the indentation length using a microscope
BS 3900-E12.2:2000	—	ISO 6441-2:1999	Methods of test for paints – Part E12.2: Determination of Knoop hardness by measurement of the indentation depth
BS 3900-E19:1999	—	ISO 15184:1998	Methods of test for paints – Part E19: Determination of film hardness by pencil test
BS EN ISO 1518:2001 ^{A)}	BS 3900-E2:1992 +A1:2001 (renumbers the BS as BS EN ISO 1518:2001)	—	Methods of test for paints – Part E2: Scratch test
BS EN ISO 1519:2002 ^{A)}	BS 3900-E1:2002	—	Paints and varnishes – Bend test (cylindrical mandrel)
BS EN ISO 1520:2006	BS 3900-E4:1995	—	Paints and varnishes – Cupping test
BS EN ISO 1522:2006	BS 3900-E5:1998	—	Paints and varnishes – Bend test (cylindrical mandrel)
BS EN ISO 2409:2007	BS 3900-E6:2007	—	Paints and varnishes – Cross-cut test
BS EN ISO 2815:2003	BS 3900-E9:2003	—	Paints and varnishes – Buchholz indentation test
BS EN ISO 4624:2003	BS 3900-E10:2003	—	Paints and varnishes – Pull-off test for adhesion
BS EN ISO 6272-1:2004	BS 3900-E13:2004	—	Paints and varnishes – Rapid-deformation (impact resistance) tests – Part 1: Falling-weight test, large-area indenter
BS EN ISO 6272-2:2006	BS ISO 6272-2:2002 +A1:2007 (renumbers the BS as BS EN ISO 6272-2:2006)	—	Paints and varnishes – Rapid-deformation (impact resistance) tests – Part 2: Falling-weight test, small-area indenter
BS EN ISO 6860:2006	BS 3900-E11:2006	—	Paints and varnishes – Bend test (conical mandrel)

Table 5 Mechanical tests on applied coatings (*continued*)

Current identifier	Previous identifier	Other references	Title
BS EN ISO 7784-1:2006	BS 3900-E14:2006 Incorporating Amendment No. 1 to BS 3900-E14:1997 (renumeres the BS as BS EN ISO 7784-1:2006)	—	Paints and varnishes – Determination of resistance to abrasion – Part 1: Rotating abrasive-paper-covered wheel method
BS EN ISO 7784-2:2006	BS 3900-E15:2006 Incorporating Amendment No. 1 to BS 3900-E15:1997 (renumeres the BS as BS EN ISO 7784-2:2006)	—	Paints and varnishes – Determination of resistance to abrasion – Part 2: Rotating abrasive rubber wheel method
BS EN ISO 7784-3:2006	BS 3900-E16:2000 +A1:2007 (renumeres the BS as BS EN ISO 7784-3:2006)	—	Paints and varnishes – Determination of resistance to abrasion – Part 3: Reciprocating test panel method
BS EN ISO 11998:2006	BS 3900-F17:1998	—	Paints and varnishes – Determination of wet-scrub resistance and cleanability of coatings
BS EN ISO 12137-1:2006 ^{A)}	BS 3900-E17:1997 +A1:2007 (renumeres the BS as BS EN ISO 12137- 1:2006)	—	Paints and varnishes – Determination of mar resistance – Part 1: Method using a curved stylus
BS EN ISO 12137-2:2006 ^{A)}	BS 3900-E18:1997 +A1:2007 (renumeres the BS as BS EN ISO 12137-2:2006)	—	Paints and varnishes – Determination of mar resistance – Part 2: Method using a pointed stylus
BS EN ISO 17132:2007	—	—	Paints and varnishes – T-bend test (ISO 17132:2007)
BS EN ISO 20566:2006	BS ISO 20566:2005 +A1:2007 (renumeres the BS as BS EN ISO 20566:2006)	—	Paints and varnishes – Determination of the scratch resistance of a coating system using a laboratory car-wash
BS EN ISO 20567-1:2006	BS ISO 20567-1:2005 +A1:2007 (renumeres the BS as BS EN ISO 20567-1:2006)	—	Paints and varnishes – Determination of stone-chip resistance of coatings – Part 1: Multi-impact testing

Table 5 Mechanical tests on applied coatings (continued)

Current identifier	Previous identifier	Other references	Title
BS EN ISO 20567-2:2006	BS ISO 20567-2:2005 +A1:2007 (renumbers the BS as BS EN ISO 20567-2:2006)	—	Paints and varnishes – Determination of stone- chip resistance of coatings – Part 2: Single-impact test with a guided impact body

A) Under revision.

Table 6 Durability and environmental tests on paint films

Current identifier	Previous identifier	Other references	Title
BS 3900-F2:1973+A1:1999	—	—	Methods of test for paints – Part F2: Determination of resistance to humidity (cyclic condensation)
BS 3900-F4:1968+A2:1979	—	—	Methods of test for paints – Part F4: Resistance to continuous salt spray
BS 3900-F5:1972 [Light fastness]	—	—	Methods of test for paints – Part F5: Determination of light fastness of paints for interior use exposed to artificial light sources
BS 3900-F6:1976 [Natural weathering]	—	—	Methods of test for paints – Part F6: Notes for guidance on the conduct of natural weathering tests
BS 3900-F10:1985 [Cathodic disbonding (marine)]	—	—	Methods of test for paints – Part F10: Determination of resistance to cathodic disbonding of coatings for use in marine environments
BS 3900-F11:1985 [Cathodic disbonding (land-based)]	—	—	Methods of test for paints – Part F11: Determination of resistance to cathodic disbonding of coatings for use on land-based buried structures
ISO 11503:1995	—	—	Methods of test for paints – Part F15: Determination of resistance to humidity (intermittent condensation)
BS 3900-F15:1995	—	—	Methods of test for paints – Part G6: Assessment of resistance to fungal growth
BS EN ISO 2810:2004	—	—	Paints and varnishes – Natural weathering of coatings – Exposure and assessment
BS EN ISO 2812-1:2007	(BS 3900-G5:1993)	—	Paints and varnishes – Determination of resistance to liquids – Part 1: Immersion in liquids other than water
BS EN ISO 2812-2:2007	(BS 3900-G8:1993)	—	Paints and varnishes – Determination of resistance to liquids – Part 2: Water immersion method
BS EN ISO 2812-3:2007	(BS 3900-G5:1993)	—	Paints and varnishes – Determination of resistance to liquids – Part 3: Method using an absorbent medium
BS EN ISO 2812-4:2007	(BS 3900-G5:1993)	—	Paints and varnishes – Determination of resistance to liquids – Part 4: Spotting methods
BS EN ISO 2812-5:2007	—	—	Paints and varnishes – Determination of resistance to liquids – Part 5: Temperature-gradient oven method
BS EN ISO 3231:1998	BS 3900-F8:1993 +A1:1998 (renumbers the BS as BS EN ISO 3231:1998)	—	Paints and varnishes – Determination of resistance to humid atmospheres containing sulfur dioxide
BS EN ISO 3248:2001	BS 3900-G7:1998 +A1:2001 (renumbers the BS as BS EN ISO 3248:2001)	—	Paints and varnishes – Determination of the effect of heat

Table 6 Durability and environmental tests on paint films (*continued*)

Current identifier	Previous identifier	Other references	Title
BS EN ISO 4623-1:2002	BS 3900-F13:2002	—	Paints and varnishes – Determination of resistance to filiform corrosion – Part 1: Steel substrates
BS EN ISO 4623-2:2004	BS 3900-F20:2004	—	Paints and varnishes – Determination of resistance to filiform corrosion – Part 2: Aluminium substrates
BS EN ISO 6270-1:2001	BS 3900-F9:2001	—	Paints and varnishes – Determination of resistance to humidity – Part 1: Continuous condensation
BS EN ISO 6270-2:2005	BS 3900-F21:2005	—	Paints and varnishes – Determination of resistance to humidity – Part 2: Procedure for exposing test specimens in condensation-water atmospheres
BS EN ISO 7783-1:2000 ^{A)}	BS 3900-G9:1996 +A1:2000 (renumerbs the BS as BS EN ISO 7783-1:2000)	—	Methods of test for paints – Part 1: Determination of water-vapour transmission rate of free films (dish method)
BS EN ISO 7783-2:1999 ^{A)}	—	—	Paints and varnishes – Coating materials and coating systems for exterior masonry and concrete – Part 2: Determination and classification of water-vapour transmission rate (permeability)
BS EN ISO 9227:2006	BS EN ISO 7253:2001, BS 3900-F12:1997	ISE/NFE/8	Corrosion tests in artificial atmospheres – Salt spray tests
BS EN ISO 11341:2004	BS 3900-F14:2004	—	Paints and varnishes – Artificial weathering and exposure to artificial radiation – Exposure to filtered xenon-arc radiation
BS EN ISO 11507:2007	BS 3900-F16:2007	—	Paints and varnishes – Exposure of coatings to artificial weathering – Exposure to fluorescent UV lamps and water
BS EN ISO 11997-1:2006	BS ISO 11997-1:2005 +A1:2007 (renumerbs the BS as BS EN ISO 11997-1:2006)	BS 3900-F18:1998	Paints and varnishes – Determination of resistance to cyclic corrosion conditions – Part 1: Wet (salt fog)/dry/humidity
BS EN ISO 11997-2:2006	BS 3900-F19:2006 Incorporating amendment no. 1 to BS 3900-F19:2000 (renumerbs the BS as BS EN ISO 11997-2:2006)	—	Paints and varnishes – Determination of resistance to cyclic corrosion conditions – Part 2: Wet (salt fog)/dry/humidity/UV light
BS EN ISO 15710:2006	BS ISO 15710:2002 +A1:2007 (renumerbs the BS as BS EN ISO 15710:2006)	—	Paints and varnishes – Corrosion testing by alternate immersion in and removal from a buffered sodium chloride solution
BS EN ISO 15711:2004	—	—	Paints and varnishes – Determination of resistance to cathodic disbonding of coatings exposed to sea water

Table 6 Durability and environmental tests on paint films (*continued*)

Current identifier	Previous identifier	Other references	Title
BS EN ISO 17872:2007	—	—	Paints and varnishes – Guidelines for the introduction of scribe marks through coatings on metallic panels for corrosion testing

A) Under revision.

Table 7 Evaluation of paint and varnish defects

Current identifier	Previous identifier	Other references	Title
BS EN ISO 4628-1:2003	BS 3900-H1:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 1: General introduction and designation system
BS EN ISO 4628-2:2003	BS 3900-H2:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 2: Assessment of degree of blistering
BS EN ISO 4628-3:2003	BS 3900-H3:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 3: Assessment of degree of rusting
BS EN ISO 4628-4:2003	BS 3900-H4:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 4: Assessment of degree of cracking
BS EN ISO 4628-5:2003	BS 3900-H5:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 5: Assessment of degree of flaking
BS EN ISO 4628-6:2007	BS 3900-H6:2007	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 6: Assessment of degree of chalking by tape method
BS EN ISO 4628-7:2003	BS 3900-H7:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 7: Assessment of degree of chalking by velvet method
BS EN ISO 4628-8:2005	BS 3900-H8:2005	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 8: Assessment of degree of delamination and corrosion around a scribe
BS EN ISO 4628-10:2003	BS 3900-H10:2003	—	Paints and varnishes – Evaluation of degradation of coatings – Designation of quantity and size of defects, and of intensity of uniform changes in appearance – Part 10: Assessment of degree of filiform corrosion
BS EN ISO 21227-1:2003	—	—	Paints and varnishes – Evaluation of defects on coated surfaces using optical imaging – Part 1: General guidance
BS EN ISO 21227-2:2006	—	—	Paints and varnishes – Evaluation of defects on coated surfaces using optical imaging – Part 2: Evaluation procedure for multi-impact stone-chipping test
BS EN ISO 21227-3:2007	—	—	Paints and varnishes – Evaluation of defects on coated surfaces using optical imaging – Part 3: Evaluation of delamination and corrosion around a scribe
BS EN ISO 21227-4:2008	—	—	Paints and varnishes – Evaluation of defects on coated surfaces using optical imaging – Part 4: Evaluation of filiform corrosion (ISO 21227-4:2008)

Table 8 Testing of coating powders

- 16 • © BSI 2010

Current identifier	Previous identifier	Other references	Title
BS 3900-J2:1993 ^{A)}	—	ISO 8130-1:1992	Methods of test for paints – Part J2: Determination of particle size distribution of coating powders by sieving
BS 3900-J3:1998 ^{B)}	—	ISO 8130-6:1992 +A1:1998	Methods of test for paints – Part J3: Determination of gel time of coating powders
BS 3900-J4:1995 ^{C)}	—	ISO 8130-8:1994	Methods of test for paints – Part J4: Determination of the storage stability of coating powders
BS 3900-J5:1993 ^{D)}	—	ISO 8130-7:1992	Methods of test for paints – Part J5: Determination of loss of mass of coating powders on heating
BS 3900-J6:1993 ^{E)}	—	ISO 8130-2:1992	Methods of test for paints – Part J6: Determination of density of coating powders by gas comparison pyknometer (referee method)
BS 3900-J7:1993 ^{F)}	—	ISO 8130-3:1992	Methods of test for paints – Part J7: Determination of density of coating powders by liquid displacement pyknometer
BS 3900-J8:1993 ^{G)}	—	ISO 8130-4:1992	Methods of test for paints – Part J8: Calculation of lower explosion limit of coating powders
BS 3900-J9:1993 ^{H)}	—	ISO 8130-5:1992	Methods of test for paints – Part J9: Determination of flow properties of a coating powder/air mixture
BS 3900-J10:1998 ^{I)}	—	ISO 8130-10:1998	Methods of test for paints – Part J10: Determination of deposition efficiency of coating powders
BS 3900-J11:1997 ^{J)}	—	ISO 8130-11:1997	Methods of test for paints – Part J11: Determination of flow of coating powders (inclined-plane method)
BS 3900-J12:1998 ^{K)}	—	ISO 8130-12:1998	Methods of test for paints – Part J12: Determination of compatibility of coating powders
BS 3900-J13:2001 ^{L)}	—	ISO 8130-13:2001	Methods of test for paints – Group J: Testing of coating powders – Part J13: Particle size analysis by laser diffraction
BS EN ISO 8130-9:2000	BS 3900-J1:1993 +A1:2000 (renumbers the BS as BS EN ISO 8130-9:2000)	—	Coating powders – Part 9: Sampling
BS EN ISO 8130-14:2004	BS 3900-J14:2004	—	Coating powders – Part 14: Terminology

Table 8 Testing of coating powders (*continued*)

- A) Likely to be renumbered as BS EN ISO 8103-1:2010
 - B) Likely to be renumbered as BS EN ISO 8103-6:2010
 - c) Likely to be renumbered as BS EN ISO 8103-8:2010
 - D) Likely to be renumbered as BS EN ISO 8103-7:2010
 - E) Likely to be renumbered as BS EN ISO 8103-2:2010
 - F) Likely to be renumbered as BS EN ISO 8103-3:2010
 - G) Likely to be renumbered as BS EN ISO 8103-4:2010
 - H) Likely to be renumbered as BS EN ISO 8103-5:2010
 - I) Likely to be renumbered as BS EN ISO 8103-10:2010
 - J) Likely to be renumbered as BS EN ISO 8103-11:2010
 - K) Likely to be renumbered as BS EN ISO 8103-12:2010
 - L) Likely to be renumbered as BS EN ISO 8103-13:2010

Table 9 Tests for release of biocides from antifouling paints

Current identifier	Previous identifier	Other references	Title
BS EN ISO 15181-1:2007	BS 3900-K1:2001	—	Paints and varnishes – Determination of release rate of biocides from antifouling paints – Part 1: General method for extraction of biocides
BS EN ISO 15181-2:2007	BS 3900-K2:2001	—	Paints and varnishes – Determination of release rate of biocides from antifouling paints – Part 2: Determination of copper-ion concentration in the extract and calculation of the release rate
BS EN ISO 15181-3:2007	BS 3900-K3:2007	—	Paints and varnishes – Determination of release rate of biocides from antifouling paints – Part 3: Calculation of the zinc ethylene-bis(dithiocarbamate) (zineb) release rate by determination of the concentration of ethylenethiourea in the extract
BS EN ISO 15181-4:2008	BS 3900-K4:2008	—	Paints and varnishes – Determination of release rate of biocides from antifouling paints – Part 4: Determination of pyridine-triphenylborane (PTPB) concentration in the extract and calculation of the release rate
BS EN ISO 15181-5:2008	BS 3900-K5:2008	—	Paints and varnishes – Determination of release rate of biocides from antifouling paints – Part 5: Calculation of the tolylfluanid and dichlofluanid release rate by determination of the concentration of dimethyl/tolylsulfamide (DMST) and dimethylphenylsulfamide (DMSA) in the extract
ISO/DIS 10890^{A)}	—	—	Paints and varnishes – Modelling of biocide release rate from antifouling paints by mass-balance calculation

^{A)} At the time of print, ISO/DIS 10890 has not been published as a standard.

Table 10 Electrochemical methods

Current identifier	Previous identifier	Other references	Title
BS EN ISO 16773-1:2007	—	—	Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 1: Terms and definitions
BS EN ISO 16773-2:2007	—	—	Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 2: Collection of data
BS EN ISO 16773-3:2009	—	—	Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 3: Processing and analysis of data from dummy cells
BS EN ISO 16773-4:2009	—	—	Paints and varnishes – Electrochemical impedance spectroscopy (EIS) on high-impedance coated specimens – Part 4: Examples of spectra of polymer-coated specimens

Table 11 Miscellaneous

Current identifier	Previous identifier	Other references	Title
BS EN 23270:1991	(BS 3900-0:1989)	ISO 3270:1984	Specification for temperatures and humidities for conditioning and testing paints, varnishes and their raw materials
BS EN ISO 1514:2004	BS 3900-A3:2004	—	Paints and varnishes – Standard panels for testing

Bibliography

For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 3483 (all parts), *Methods for testing pigments for paints*

BS 3962 (all parts), *Methods of test for finishes for wooden furniture*

BS 6782 (all parts), Binders for paints

