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Mazdoor Kisan Shakti Sangathan

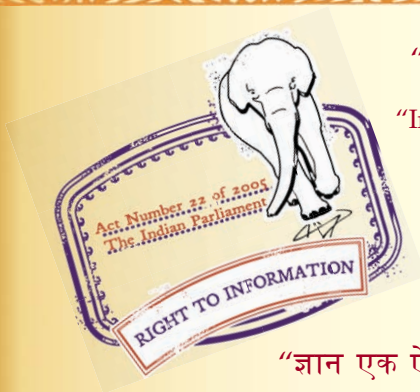
“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 3536 (1999): Ready Mixed Paint, Brushing, Wood Primer
[CHD 20: Paints, Varnishes and Related Products]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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IS 3536 : 1999
Reaffirmed 2010

भारतीय मानक

तैयार मिश्रित रंग रोगन, ब्रुश करने लायक,
लकड़ी के लिये प्राइमर — विशिष्टि
(पहला पुनरीक्षण)
Indian Standard

**READY MIXED PAINT, BRUSHING, WOOD
PRIMER — SPECIFICATION**
(*First Revision*)

ICS 87.040

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BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

April 1999

Price Group 3

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Paints (Other than Industrial Paints) and Allied Products Sectional Committee had been approved by the Chemical Division Council.

This standard was originally issued as IS 3536E : 1966 in accordance with the simplified emergency procedures to meet the urgent needs of the country, as an alternative to IS 103 : 1962. Later the emergency character of the standard was removed and was published as IS 3536 : 1966. In the meantime IS 103 : 1962 has been withdrawn as IS 3536 : 1966 was found to be appropriate, which used indigenous raw material very judiciously.

Due to technological advancements made during the last few decades, a need was felt to revise this standard. In this revised version while requirement for composition has been simplified, a new clause of lead restriction has been included. The optional requirements of spreading capacity and spreading time have been dropped, while requirements for scratch hardness and water content have been included in this revision.

The composition of technical committee responsible for the formulation of this standard is given in Annex D.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

AMENDMENT NO. 1 DECEMBER 1999
TO
IS 3536 : 1999 READY MIXED PAINT, BRUSHING,
WOOD PRIMER — SPECIFICATION
(First Revision)

(Page 2, clause **5.2.1**) — Insert the following new clauses after **5.2.1**:

5.2.2 *BIS Certification Marking*

The product may also be marked with the Standard Mark.

5.2.2.1 The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.'

(Page 2, *Annex A*)— Substitute the following:

'(Part 4/Sec 2) : 1989' for '(Part 4/Sec 2) : 1988',

'(Part 5/Sec 2) : 1989' for '(Part 5/Sec 2) : 1988' and

'(Part 8/Sec 5) : 1993' for '(Part 8/Sec 5) : 1989'.

(CHD 20)

Indian Standard

READY MIXED PAINT, BRUSHING, WOOD PRIMER — SPECIFICATION

(*First Revision*)

1 SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for ready mixed paint, brushing, wood primer.

1.2 This material is intended for use as a primer for wood.

2 REFERENCES

The Indian Standards listed in Annex A contain provisions which through reference in this text constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

3 TERMINOLOGY

3.1 For the purpose of this standard, the definitions given in IS 1303 and the following shall apply.

3.1.1 Ambient Temperature

It is the temperature between 21°C and 38°C.

4 REQUIREMENTS

4.1 The material shall be of such a composition so as to meet the requirements of this standard.

4.2 Lead Restriction

The material shall not contain lead or compounds of lead or mixture of both, calculated as lead monoxide (PbO), exceeding 5 percent by mass, when tested in accordance with IS 101 (Part 8/Sec 5).

4.3 The material shall also comply with the requirements given in Table 1.

4.4 Resistance to Water

The increase in mass of the panel, when test as presented in Annex C shall not exceed 40 mg/cm².

4.5 Keeping Properties

The material when stored in original sealed container under ambient condition shall conform to all the requirements as mentioned in **4.1**, **4.2**, **4.3** and **4.4** of

this standard on testing after a period of one year from the date of manufacture.

**Table 1 Requirements for Ready Mixed Paint,
Brushing, Wood Primer**
(Clause 4.3)

Sl No.	Characteristic	Requirement	Method of Test, Ref to	
			Annex of this Standard	IS 101
(1)	(2)	(3)	(4)	(5)
i)	Drying time:			Part 3/Sec 1
	a) Surface dry	Not more than 2 h		
	b) Hard dry	Not more than 16 h		
ii)	Consistency	Smooth and uniform, suitable for brushing on wood	B	
iii)	Finish	Smooth and egg-shell or matt, as required		Part 3/Sec 4
iv)	Colour	White, pink or grey, as agreed to between purchaser and supplier		Part 4/Sec 2
v)	Scratch hardness	No such scratch as to show the bare metal if tested under a load of 500 g		Part 5/Sec 2
vi)	Flexibility and adhesion	To pass the test		Part 5/Sec 2
vii)	Flashpoint	Not below 30°C		Part 1/Sec 6
viii)	Water content (if suspected to be present), percent by mass, <i>Max</i>	1.0		Part 2/Sec 1
ix)	Mass, in kg/101, <i>Min</i>	12.0		Part 1/Sec 7
x)	Volume solids, percent by mass, <i>Min</i>	40		Part 8/Sec 6

5 PACKING AND MARKING

5.1 Packing

The material shall be packed as agreed to between purchaser and supplier, taking precautions that material does not deteriorate during storage.

5.2 Marking

5.2.1 The material shall be marked with the following:

- a) Name of the material;

- b) Indication of the source of manufacture;
- c) Volume of the material;
- d) Lot number or batch number in code or otherwise; and
- e) Month and year of manufacture.

6 SAMPLING

Representative samples of the material shall be drawn as prescribed under 6 of IS 101 (Part 1/Sec 1).

7 TESTS

7.1 Test shall be conducted as referred in **4.1, 4.2, 4.3** and **4.4**.

7.2 Quality of Reagents

Unless otherwise specified, pure chemicals and distilled water (*see* IS 1070) shall be employed.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
101	Methods of sampling and test for paints, varnish and related products:	(Part 3/Sec 4): 1987	Tests on paint film formation, Section 4 Finish (<i>third revision</i>)
(Part 1/Sec 1): 1986	Test on liquid paints (general and physical), Section 1 Sampling (<i>third revision</i>)	(Part 4/Sec 1): 1988	Optical tests on paint films, Section 1 Opacity (<i>third revision</i>)
(Part 1/Sec 3): 1986	Test on liquid paints (general and physical), Section 3 Preparation of panels (<i>third revision</i>)	(Part 4/Sec 2): 1988	Optical tests on paint films, Section 2 Colour (<i>third revision</i>)
(Part 1/Sec 6): 1987	Test on liquid paints (general and physical), Section 6 Flash point (<i>third revision</i>)	(Part 5/Sec 2): 1989	Mechanical tests on paint films, Section 2 Flexibility and adhesion tests (<i>third revision</i>)
(Part 1/Sec 7): 1987	Test on liquid paints (general and physical), Section 7 Mass per 10 litres (<i>third revision</i>)	(Part 8/Sec 5): 1989	Test for pigments and other solids, Section 5 Lead restrictions
(Part 2/Sec 1): 1988	Test on liquid paints (chemical examination), Section 1 Water content (<i>third revision</i>)	(Part 8/Sec 6): 1993	Tests for pigments and other solids, Section 6 Volume solids
(Part 3/Sec 1): 1986	Tests on paint film formation, Section 1 Drying time (<i>third revision</i>)	1070:1992	Reagent grade water (<i>third revision</i>)
		1303 : 1983	Glossary of terms relating to paints (<i>second revision</i>)

ANNEX B

[Table 1, Sl No. (ii)]

CONSISTENCY

B-1 APPARATUS

B-1.1 Palette Knife or Metal Rod

B-1.2 Wood Panels

B-1.2.1 Unless specified otherwise, wood panels shall be prepared as prescribed in 5 of IS 101 (Part 1/ Sec 3).

B-2 PROCEDURE

Insert a clean metal rod or palette knife into the original container and examine the nature of settling. The material shall not cake hard inside the container and shall be in such a condition that stirring easily produces a smooth uniform primer suitable for brushing on wood panels.

ANNEX C

(Clause 4.4)

DETERMINATION OF RESISTANCE TO WATER**C-1 APPARATUS****C-1.1 Wooden Panel**

A panel of *chir* wood, *Pinus spp* fam. Pinaceae approximately 100 cm² and 10 mm thick with rounded edges and rubbed down to a smooth surface with sand or glass paper shall be used. The timber to be used for the preparation of panel shall be reasonably straight-grained and well-seasoned to a moisture content not exceeding 12 percent.

C-2 PROCEDURE

Apply the paint to both sides of the panel to give a dry film mass in accordance with Table 1 of IS 101

(Part 3/Sec 4) and allow it to air-dry for 24 h. Apply two further coats of the paint in the same manner at an interval of 24 h and allow it to dry for 24 h after the application of final coat. Seal the edges of the painted panel with wax up to a depth of 6 mm by dipping in suitable molten wax and allow to dry for 48 h. Check the mass of the test panel and completely immerse it in water at a temperature between 21 to 38°C, for 7 days. Remove the panel and wipe off the surface water with a blotting paper and re-check the mass immediately. From the area of the painted surface in contact with water, which is taken as total surface area of the panel not coated with wax, calculate the increase in mass per unit area.

ANNEX D
(Foreword)
COMMITTEE COMPOSITION

Paints (Other than Industrial Paints) and Allied Products Sectional Committee, CHD 20

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Member-Secretary
DR R. K. SINGH
Additional Director (Chem), BIS

(Continued on page 5)

(Continued from page 4)

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Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards: Monthly Additions'.

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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