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IS: 3585 - 1966 ( Reaffirmed 2009 )

# Indian Standard SPECIFICATION FOR READY MIXED PAINT, ALUMINIUM, BRUSHING, PRIMING, WATER RESISTANT, FOR WOODWORK

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

**Gr 2** August 1966

# AMENDMENT NO. 2 JULY 1988

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[ Page 5 ment after S	, <i>Table</i> 1, <i>Sl No</i> . (v l No. (viii):	viii) ] — Add the following	new require-	
(1)	(2)	(3)	(4)	
ix)	Wet opacity	Between —10 percent and + 20 percent of the approved sample	10	
( Page 5, clause 3.6) — Delete and renumber the subsequent clauses.				
(CDC 8)				
	Rep	prography Unit, BIS, New D	elhi, India	

## Indian Standard SPECIFICATION FOR READY MIXED PAINT, ALUMINIUM, BRUSHING, PRIMING, WATER RESISTANT, FOR WOODWORK

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# Indian Standard

### SPECIFICATION FOR READY MIXED PAINT, ALUMINIUM, BRUSHING, PRIMING, WATER RESISTANT, FOR WOODWORK

#### 0. FOREWORD

- **0.1** This Indian Standard was adopted by the Indian Standards Institution on 17 February 1966, after the draft finalized by the Paints and Allied Products Sectional Committed had been approved by the Chemical Division Council.
- **0.2** The Sectional Committee felt that a wood primer suitable for use under both oil-based and varnish-based finishing paints was also desirable. It also transpired that the Ministry of Defence had already formulated JSS No. 3005 (Prov)-1963\*, based on non-leafing aluminium paste and synthetic resin varnish medium. This material, which is presently being used for bridging equipment, pontoons, buoys, marine craft, etc, and found advantageous where a quick drying water resistant material for woodwork is required, has been taken into consideration in drawing up this standard specification.
- **0.3** This standard is one of a series of Indian Standard specifications on wood primers. Other specifications published so far in this series are:
  - IS: 103-1962 Ready mixed paint, brushing, white lead, for priming and general purposes ( revised)
  - IS: 106-1962 Ready mixed paint, brushing, priming, for enamels for use on wood ( revised )
- **0.4** This standard contains clauses **3.6** and **3.7** which permit an option for certain additional tests, if agreed to between the purchaser and the supplier. In addition, it contains clauses **4.1** and **4.3** which call for an agreement between the purchaser and the supplier.
- **0.5** 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

<sup>\*</sup>Paint, P. F. U., priming, aluminium, water resistant (brushing/spraying).

IS: 2-1960\*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

#### 1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for ready mixed paint, aluminium, brushing, priming, water resistant, for woodwork. The material is used as a primer in the painting system normally followed for paints and wooden surfaces. It is used for the protection of woodwork both under marine and inland outdoor conditions. It may also be used for direct application to metal surfaces.

#### 2. TERMINOLOGY

**2.1** For the purpose of this standard, the definitions given in IS: 1303-1963† shall apply.

#### 3. REQUIREMENTS

**3.1 Composition** — The material shall consist of the ingredients mixed in the proportions, by weight, specified below:

Percent by Weight a) Non-leafing aluminium paste (conforming to IS: 289-1963‡) except with regard to determination of leafing value 20. Min b) Suitable oil-modified phenolic varnish c) Liquid driers (conforming to IS: Min or IS: 386-1962||)

d) Thinners

50, *Max* (includ-. ing that introduced with aluminium paste varnish medium and driers)

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

<sup>\*</sup>Rules for rounding off numerical values ( revised ).

<sup>†</sup>Glossary of terms relating to paints ( revised ).

Specification for aluminium paste for paints ( revised ). Specification for liquid driers for paints ( revised ).

<sup>//</sup>Specification for liquid driers, concentrated for paints ( revised ).

TABLE 1 REQUIREMENTS FOR READY MIXED PAINT, ALUMINIUM, BRUSHING, PRIMING, WATER RESISTANT, FOR WOODWORK

(Clause 3.2)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST ( REF TO CL NO. IN IS: 101-1964*)
(1)	(2)	(3)	(4)
i)	Drying time, hard dry	Not more than 8 hours	7.2
ii)	Consistency, time of flow	Smooth and uniform, 30 to 40 seconds	7.4 7.4.1
iii)	Finish	Smooth	7.5
iv)	Scratch hardness	No such scratch as to show the bare metal	15.1
v)	Flexibility and adhesion after 48 hours air-drying	No visible damage or detachment of film	16
vi)	Protection against corrosion under conditions of condensation	No signs of corrosion	18
vii)	Flash point	Not below 30°C	24
viii)	Keeping properties	Not less than one year	31

<sup>\*</sup>Methods of test for ready mixed paints and enamels ( second revision ).

- **3.3 Water Content** If water is suspected to be present in the material, it shall not exceed 0.5 percent when tested as prescribed in **14** of IS: 101-1964\*.
- **3.4 Resistance to Water** The increase in weight of the panel, when tested as prescribed in Appendix A, shall not exceed 20 mg/cm<sup>2</sup>.
- **3.5 Weight in kg/10 Litres** The minimum weight in kg/10 litres of this material, when tested in accordance with **25** of IS: 101-1964\*, is 9.2. It shall be, however, within  $\pm 3$  percent of the sample approved against this specification, if any.
- **3.6 Optional Requirements** In addition, if agreed to between the purchaser and the supplier, the spreading capacity, spreading time and wet opacity shall be determined in accordance with relevant methods of test as given in IS: 101-1964\* and the results recorded on the sample offered for approval against the specification. In the case of supplies offered against any approved sample to this specification, these characteristics shall be within 90 percent of the approved sample.

Methods of test for ready mixed paints and enamels ( second revision ).

- **3.7 Lead Free Material** When lead free material is required in addition to the requirements stipulated in **3.1** to **3.6**, it shall also be tested for freedom from lead in accordance with the procedure prescribed under **29** of IS: 101-1964\*.
- **3.7.1** When thus tested, the metallic lead (Pb) content shall not exceed 0.03 percent in the material.

#### 4. PACKING AND MARKING

- **4.1 Packing** The material shall be packed as agreed to between the purchaser and the supplier.
- **4.2 Marking** The containers shall be marked with the name of the material; manufacturer's name and trade-mark, if any; volume of the material; and month and year of manufacture.
- **4.2.1** The containers may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act and the Rules and Regulations made thereunder. The ISI Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well-defined system of inspection, testing and quality control which is devised and supervised by ISI and operated by the producer. ISI marked products are also continuously checked by ISI for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

**4.3** Other details of packing and marking shall be in accordance with the instructions given by the purchaser.

#### 5. SAMPLING

**5.1** Representative samples of the material shall be drawn as prescribed in **3** of IS: 101-1964\*.

#### 6. TESTS

- **6.1** Tests shall be conducted as prescribed in IS: 101-1964\*. References to the relevant clauses of that standard are given in col 4 of Table 1.
- **6.2 Quality of Reagents** Unless specified otherwise, pure chemicals and distilled water ( see IS: 1070-1960†) shall be employed in tests.

 ${
m NOTE}$  - 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the result of analysis.

<sup>\*</sup>Methods of tests for ready mixed paints and enamels ( second revision ).

<sup>†</sup>Specification for water, distilled quality ( revised ).

#### APPENDIX A

(*Clause* 3.4)

#### DETERMINATION OF RESISTANCE TO WATER

#### A-1. APPARATUS

**A-1.1 Wooden Panel**—a panel of chir wood, *Pinus* spp., fam. Pinaceæ, approximately 100 cm square and 10 mm thick with rounded edges and rubbed down to smooth surface with sand or glass paper. The timber to be used for preparation of panel shall be reasonably straight grained and well-seasoned to a moisture content not exceeding 12 percent.

#### A-2. PROCEDURE

**A-2.1** Apply the paint to both sides of the panel to give a dry film weight in accordance with **6.4** of IS: 101-1964\* and allow it to air-dry for 24 hours. Apply two further coats of the paint in the same manner at an interval of 24 hours and allow it to dry for 24 hours after the application of the 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 hours. Weigh the test panel and completely immerse it in water at a temperature of 21 to 38°C for 7 days. Remove the panel and wipe off the surface water with a blotting paper and re-weigh 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 weight per unit area.

<sup>\*</sup>Methods of test for ready mixed paints also enamels ( second revision ).

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