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IS 109 (1968): Ready Mixed Paint, Brushing, Priming, Plaster, to Indian Standard Colour No. 361 Light Stone, and No. 631 Light Grey [CHD 20: Paints, Varnishes and Related Products]



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Indian Standard

**SPECIFICATION FOR READY MIXED PAINT,
BRUSHING, PRIMING, PLASTER, TO INDIAN
STANDARD COLOUR NO. 361 LIGHT STONE,
AND NO. 631 LIGHT GREY**

(First Revision)

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(Including Amendment Nos. 1, 2 & 3)

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BUREAU OF INDIAN STANDARDS
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AMENDMENT NO. 3 JUNE 1988
TO
IS : 109 - 1968 SPECIFICATION FOR READY MIXED
PAINT, FINISHING, PRIMING, PLASTER, TO
INDIAN STANDARD COLOUR NO. 361 LIGHT
STONE, AND NO. 631 LIGHT GREY, AND
OFF-WHITE

(First Revision)

(Page 4, clause 3.6) — Delete.

[Page 5, Table 1, Sl No. (vii)] — Add the following new requirement after Sl No. (vii) :

(1)	(2)	(3)	(4)
viii)	Wet opacity	Between — 10 percent and + 20 percent of the approved sample	10

(CDC 8)

AMENDMENT NO. 2 AUGUST 1984

TO

IS:109-1968 SPECIFICATION FOR READY MIXED PAINT,
FINISHING, PRIMING, PLASTER, TO INDIAN STANDARD
COLOUR NO. 361 LIGHT STONE, AND NO. 631
LIGHT GREY AND OFF-WHITE

(First Revision)

Alteration

(First Cover page, Pages 1 and 3, Title) -
Substitute the following for the existing title at
all places:

'Indian Standard

SPECIFICATION FOR READY MIXED PAINT, FINISHING,
PRIMING, PLASTER, TO INDIAN STANDARD
COLOUR NO. 361 LIGHT STONE AND
NO. 631 LIGHT GREY, WHITE AND OFF-WHITE

(First Revision)'

(Page 4, clause 1.1, line 3 and Amendment No. 1)
Substitute the following for the existing text:

*'Indian Standard Colour No. 361 light stone and
No. 631 light grey, white and off-white'*

*(Page 5, Table 1, Caption) - Substitute 'WHITE
AND OFF-WHITE' for 'AND OFF-WHITE'.*

(CDC 8)

AMENDMENT NO. 1 OCTOBER 1972
TO
IS : 109-1968 SPECIFICATION FOR READY MIXED
PAINT, BRUSHING, PRIMING, PLASTER, TO
INDIAN STANDARD COLOUR NO. 361 LIGHT
STONE, AND NO. 631 LIGHT GREY
(First Revision)

Alterations

(First cover page, pages 1 and 3, Title) — Substitute the following for the existing title at all places:

‘ Indian Standard

SPECIFICATION FOR READY MIXED PAINT, FINISHING,
PRIMING, PLASTER, TO INDIAN STANDARD COLOUR
NO. 361 LIGHT STONE, AND NO. 631 LIGHT
GREY AND OFF-WHITE

(First Revision)’

(Page 4, clause 1.1, line 3, first sentence) — Add the following words at the end of the sentence:

‘ and off-white ’

(Page 5, Table 1, caption) — Substitute the following for the existing caption:

‘TABLE 1 REQUIREMENTS FOR READY MIXED PAINT, FINISHING,
PRIMING, PLASTER, TO INDIAN STANDARD COLOUR NO. 361
LIGHT STONE, AND NO. 631 LIGHT GREY AND OFF-WHITE’

Indian Standard

SPECIFICATION FOR READY MIXED PAINT, BRUSHING, PRIMING, PLASTER, TO INDIAN STANDARD COLOUR NO. 361 LIGHT STONE, AND NO. 631 LIGHT GREY (*First Revision*)

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(*Continued on page 2*)

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IS : 109 - 1968

(Continued from page 1)

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Indian Standard

SPECIFICATION FOR READY MIXED PAINT, BRUSHING, PRIMING, PLASTER, TO INDIAN STANDARD COLOUR NO. 361 LIGHT STONE, AND NO. 631 LIGHT GREY

(First Revision)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 28 August 1968, after the draft finalized by the Paints and Allied Products Sectional Committee had been approved by the Chemical Division Council.

0.2 This standard was first published in 1950, based on the *interim* co-ordinated draft produced with the assistance of the representatives of manufacturers and of various departments and authorities of the Government of India, by the Co-ordinating Subcommittee of the No. 5 Standing Committee on Specifications for Paints and Allied Stores of the General Headquarters, India (now Army Headquarters).

0.3 In this revision, a new shade IS Colour No. 631 light grey has been added. Though essentially an open composition, in the revised standard use of imported materials like tung oil has been prevented. The method of test for alkali resistance has been improved and other changes necessary in requirements as a result of experience gained through the usage of this standard have been incorporated.

0.4 This standard contains a clause 3.6 which calls 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 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.

*Rules for rounding off numerical values (revised).

IS : 109 - 1968

1. SCOPE

1.1 This standard prescribes the requirements, and the methods of sampling and test for ready mixed paint, brushing, priming, plaster, to Indian Standard colour No. 361 light stone and No. 631 light grey. The material is used as a sealer on plaster, brickwork, asbestos cement sheetings, etc.

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 101-1964* and IS : 1303-1963† shall apply.

3. REQUIREMENTS

3.1 Composition — The material shall be manufactured with suitable pigments, extenders and suitable medium, in such proportions as to satisfy the requirements of this standard.

3.2 Resistance to Alkali — The material when tested as prescribed in Appendix A shall not be inferior to that of the approved sample in respect of softening, blistering, cracking, or change of colour of the alkali sensitive distemper.

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

3.4 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*.

3.5 Weight in kg/10 Litres — The weight in kg/10 litres of this material, when tested in accordance with 25 of IS : 101-1964*, shall be within ± 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.

4. PACKING AND MARKING

4.1 Packing — The material shall be packed as agreed to between the purchaser and the supplier.

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

†Glossary of terms relating to paints (*revised*).

TABLE 1 REQUIREMENTS FOR READY MIXED PAINT, BRUSHING, PRIMING, PLASTER, TO INDIAN STANDARD COLOUR NO. 361 LIGHT STONE AND NO. 631 LIGHT GREY

(Clause 3.3)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST (REF TO CL No. IN IS : 101-1964*)
(1)	(2)	(3)	(4)
i)	Drying time:		
	a) Surface dry	Not more than 8 hours	7.1, 7.2 and 7.3
	b) Hard dry	Not more than 24 hours	
ii)	Consistency	Smooth and uniform	7.4
iii)	Finish	Smooth and matt to semi-gloss	7.5
iv)	Colour	Approximate match to the approved sample	11
v)	Resistance to water	Not inferior to the approved sample	23
vi)	Flash point	Not below 30°C	24
vii)	Keeping properties	Not less than 6 months	31

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

4.2 Marking — The containers shall be marked with the name of the material; the manufacturer's name and trade-mark; if any; volume of the material; and the month and year of manufacture.

4.2.1 The product may also be marked with Standard Mark.

4.2.2 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 Standard Mark may be granted to manufactures or producers may be obtained from the Bureau of Indian Standards.

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

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5. SAMPLING

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

6. TEST METHODS

6.1 Tests shall be conducted according to the methods prescribed in IS : 101-1964* and in Appendix A. References to relevant clauses of IS : 101-1964* are given in 3.4 to 3.6 and in col 4 of Table 1 and to Appendix A in 3.2.

6.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see* IS : 1070-1960†) shall be employed in tests.

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

A P P E N D I X A

(*Clause 3.2*)

DETERMINATION OF RESISTANCE TO ALKALI

A-0. GENERAL

A-0.1 Outline of the Method — Asbestos cement test panels are soaked in alkali solution and dried. These are painted with the material and alkali sensitive distemper. This panel with the painted surface upward and another similarly prepared using an approved sample are allowed to remain in contact with wet blotting paper for the prescribed time at room temperature and their surfaces compared for appearance of blue spots and extent of general deterioration of the paint film.

A-1. MATERIALS

A-1.1 Test Panels — of asbestos cement and size 150 × 100 × 5 mm.

A-1.2 Sodium Hydroxide Solution — 5 percent (*w/v*).

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

†Specification for water, distilled quality (*revised*).

A-1.3 Alkali Sensitive Distemper — shall be prepared with the following ingredients:

- | | |
|---|--------|
| a) Titanium dioxide (conforming to IS : 411-1968*) | 15 g |
| b) Yellow ochre (conforming to IS : 47-1950†) | 2 g |
| c) Whiting (conforming to IS : 63-1964‡) | 45 g |
| d) Bromothymol blue (solution prepared in 50 percent ethyl alcohol) | 0.25 g |
| e) Glue, 10 percent solution in water | 15 ml |

A-2. PROCEDURE

A-2.1 Preparation of the Panel for Test — Completely immerse panels of asbestos cement flat sheet, approximately $150 \times 100 \times 5$ mm in size and having a water absorption of not less than 20 percent, in a 5 percent solution of sodium hydroxide for 24 hours at room temperature. Withdraw the panels and allow to drain for 15 minutes at room temperature and then stove for 4 hours at a temperature of 150°C . Allow the panel to stand for 24 hours at room temperature. Apply three coats of the material on one of the prepared panels by brushing to give a dry film weight of 25 to 30 mg per cm^2 . Allow the panel to stand for 96 hours at room temperature. Subsequently apply a coat of alkali sensitive distemper by brushing to the centre of the paint film, covering approximately a surface of 75×50 mm and allow to dry for 1 hour at room temperature.

A-2.2 Place the panel with the paint film upward and six sheets of wet blotting paper, placed on a glass plate, supported on two beakers filled with water. The ends of the blotting papers are so placed that they dip into the water in the beakers at either end of the glass plate. Lever the panel in contact with wet blotting paper for 8 hours at room temperature examining the surface covered by the alkali sensitive distemper every 30 minutes. Record the time of appearance of any signs of transmission alkali through the paint film, as indicated by the appearance of blue spots on the surface of the distemper. Conduct a control test in the same manner and at the time on the approved sample.

A-2.3 Report the time taken for the appearance of blue spots in the panel painted with the material and compare with the result of test with the approved sample. Compare the condition of softening, blistering or cracking of the panel treated with the material and then treated with the approved sample.

*Specification for titanium dioxide for paints (revised).

†Specification for ochre, red and yellow.

‡Specification for whiting for paints (revised).

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