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IS 137 (1965): Ready mixed paint, brushing, matt or eggshell flat, finishing, interior to Indian Standard Colour as required [CHD 20: Paints, Varnishes and Related Products]



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Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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REAFFIRMED

IS : 137 - 1965

Indian Standard

REAFFIRMED

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SPECIFICATION FOR
READY MIXED PAINT, BRUSHING,
MATT OR EGG-SHELL FLAT, FINISHING,
INTERIOR, TO INDIAN STANDARD
COLOUR, AS REQUIRED

(Revised)

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

Indian Standard

SPECIFICATION FOR READY MIXED PAINT, BRUSHING, MATT OR EGG-SHELL FLAT, FINISHING, INTERIOR, TO INDIAN STANDARD COLOUR, AS REQUIRED (*Revised*)

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*In the absence of Shri W. E. Norris, Shri S. S. Nayudu presided over the meeting when this revised standard was finalized.

(*Continued on page 2*)

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AMENDMENT NO. 2 OCTOBER 1988

TO

**IS : 137 - 1965 SPECIFICATION FOR READY
MIXED PAINT, BRUSHING, MATT OR EGG-SHELL
FLAT, FINISHING, INTERIOR TO INDIAN
STANDARD COLOUR, AS REQUIRED**

(Revised)

(Page 5, clause 3.6) — Delete.

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

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

(CDC 8)

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AMENDMENT NO. 3 OCTOBER 1988
TO
IS : 137 -1965 SPECIFICATION FOR READY
MIXED PAINT, BRUSHING, MATT OR EGG-SHELL
FLAT, FINISHING, INTERIOR, TO INDIAN
STANDARD COLOUR, AS REQUIRED

(Revised)

(Page 4, clause 3.1.1) — Delete.

(CDC 8)

Printed at : Prabhat Offset Press, New Delhi-2

Indian Standard
SPECIFICATION FOR
READY MIXED PAINT, BRUSHING,
MATT OR EGG-SHELL FLAT, FINISHING,
INTERIOR, TO INDIAN STANDARD
COLOUR, AS REQUIRED
(Revised)

0. FOREWORD

0.1 This Indian Standard (Revised) was adopted by the Indian Standards Institution on 2 April 1965, 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 issued in 1950 and was based largely on the *interim* co-ordinated draft, compiled 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 (now Army Headquarters), India. In the study for revision, ample consideration has been given to compatibility of composition *vis-a-vis* performance tests and the examination of all other anomalies. The present revision incorporates all changes found necessary after the study and the results of experience gained in the use of the earlier version of the standard during the last-decade. Indian Standard colours specified from IS : 5-1961* in the original version have been deleted and selection of colours in matt finish or semi-gloss finish from IS : 1650-1960† are specified as these are pastel shades and are suitable for interior decoration. Besides, this revised standard has been orientated as an open composition and performance specification. Metricization already accomplished through Amendment No. 2, January 1962, is included in this revision.

0.3 This standard is one of a series of Indian Standard specifications for ready mixed paints, oil based, for interior use, finishing.

*Colours for ready mixed paints (*revised*).

†Colours for building and decorative finishes.

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0.4 This standard contains clause **3.6** which permits an option for certain additional tests, if agreed to 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.

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for ready mixed paint, brushing, matt or egg-shell flat, finishing, interior, with the distinctive colour as required. The material is used for the interior protection and decoration of buildings and is normally applied as a painting system over the appropriate priming paints.

2. TERMINOLOGY

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

3. REQUIREMENTS

3.1 Composition — The material shall be of such a composition as to satisfy the requirements of this standard.

3.1.1 Gypsum and calcium sulphate shall not be used.

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

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 The minimum weight in kg/10 litres of this material, when tested in accordance with **25** of IS : 101-1964‡, is 13.0. It shall be, however, within ± 3 percent of the sample approved against this specification, if any.

3.5 Lead-Free Material — In addition to the requirements stipulated in **3.1** to **3.3**, the material shall also be tested for freedom from lead in accordance with the procedure prescribed under **29** of IS : 101-1964‡. When

*Rules for rounding off numerical values (*revised*).

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

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

thus tested, the material shall not contain lead or lead compounds or a mixture of both, calculated as metallic lead (Pb), exceeding 0.03 percent.

TABLE 1 REQUIREMENTS FOR READY MIXED PAINT, BRUSHING, MATT OR EGG-SHELL FLAT, FINISHING, INTERIOR, WITH THE DISTINCTIVE COLOUR AS REQUIRED

(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		7.1, 7.2 & 7.3
	a) Surface dry	Not less than 30 minutes	
	b) Hard dry	Not more than 18 hours	
ii)	Consistency	Smooth and uniform	7.4
iii)	Finish	Smooth and matt or egg-shell flat	7.5
iv)	Colour	Close match to the specified IS colour (see Appendix A).	11
v)	Fastness to light	To pass the test	12
vi)	Scratch hardness	No such scratch as to show the bare metal	15.1
vii)	Flexibility and adhesion after 48 hours air-drying	No visible damage or detachment of film	16
viii)	Stripping test	Scratches free from jagged edges	17
ix)	Flash point	Not below 30°C	24
x)	Keeping properties	Not less than one year	31

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

3.6 Optional Requirements — In addition, if agreed to between the purchaser and the supplier, the spreading capacity and spreading time 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).

4. PACKING AND MARKING

4.1 Packing — Unless otherwise agreed to between the purchaser and the supplier, the paint shall be packed in metal containers conforming to IS: 1407-1959* and IS: 2552-1963†.

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 containers may also be marked with the Standard Mark.

NOTE — 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 Standard 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 BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers 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.

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‡. References to the relevant clauses of the standard are given in col 4 of Table 1 and in 3.3 to 3.6.

6.1.1 For match against IS colour, IS: 1650-1960§ shall be used. Selected list of colours with colour designations as given in IS: 1650-1960§ is included in Appendix A.

6.2 Quality of Reagents — Unless otherwise specified, 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.

*Specification for round paint tins.

†Specification for steel drums (galvanized and ungalvanized).

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

§Colours for building and decorative finishes.

||Specification for water, distilled quality (revised).

APPENDIX A

[Table 1, Item (iv) and Clause 6.1.1]

**SELECTED LIST OF COLOURS FOR MATT FINISHES AS
GIVEN IN IS : 1650-1960 COLOURS FOR BUILDING AND
DECORATIVE FINISHES WITH CORRESPONDING
MUNSELL REFERENCES**

<i>IS Colour No.</i>	<i>Munsell Ref</i>	<i>IS Colour No.</i>	<i>Munsell Ref</i>
RED		YELLOW	
1-015	7.5 R 9/2	4-046	5 Y 9.25/1
1-016	5 R 7/2	4-047	5 Y 8/2
1-017	5 R 6/2	4-048	5 Y 7/2
1-020	7.5 R 8/4	4-049	5 Y 6/2
YELLOW-RED		4-052	5 Y 9.25/4
2-026	7.5 YR 8.5/4	4-053	10 Y 9/4
2-027	7.5 YR 7/2	4-054	7.5 Y 9/6
2-028	5 YR 6/3	4-055	7.5 Y 9/8
2-030	5 YR 8/4	GREEN-YELLOW	
2-031	2.5 YR 7/6	5-058	10 Y 8/2
3-033	10 YR 9.25/1	5-059	2.5 GY 7/2
3-034	10 YR 9/2	5-060	2.5 GY 6/2
3-035	10 YR 8/2	5-062	2.5 GY 8/6
3-036	10 YR 6/2	5-064	5 GY 5/6
3-037	2.5 Y 5/2	GREEN	
3-040	2.5 Y 9/3	6-066	2.5 G 6/2
3-041	10 YR 9/6	6-067	10 GY 5/2
3-042	2.5 Y 8/4	6-069	10 GY 9/2
3-043	10 YR 6.5/5	6-070	7.5 GY 9/4
		6-071	7.5 GY 7/4

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IS Colour *Munsell Ref*
No.

BLUE-GREEN

7-075	5 G 9/2
7-076	5 G 7/1
7-077	7·5 BG 6/2
7-078	5 G 6/1
7-079	5 BG 7/4
7-081	5 B 9/2
7-082	5 B 8/4
7-083	5 B 7/4

PURPLE-BLUE

8-087	5 PB 8/2
8-089	7·5 PB 6/0·5

IS Colour *Munsell Ref*
No.

RED-PURPLE

8-090	10 RP 8/4
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GREY

9-093	N 9
9-094	N 8
9-095	N 7
9-096	7·5 R 6/0·5
9-099	2·5 Y 8/0·5
9-100	2·5 Y 6/0·5

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*Eastern : 1/14 CIT Scheme VII, V.I.P. Road, Kankurgachi, CALCUTTA 700054 337 86 62

Northern : SCO 335-336, Sector 34-A, CHANDIGARH 160022 60 38 43

Southern : C.I.T. Campus, IV Cross Road, CHENNAI 600113 235 23 15

†Western : Manakalaya, E9, MIDC, Behind Marol Telephone Exchange, Andheri (East), MUMBAI 400093 832 92 95

Branch Offices:

*Pushpak, Nurmohamed Shaikh Marg, Khanpur, AHMEDABAD 380001 550 13 48

‡Peenya Industrial Area, 1st Stage, Bangalore-Tumkur Road, BANGALORE 560058 839 49 55

Commercial-cum-Office Complex, Opp. Dushera Maidan, E-5 Arera Colony, Bittan Market, BHOPAL 462016 72 34 52

62/63, Ganga Nagar, Unit VI, BHUBANESWAR 751001 40 36 27

5th Floor, Kovai Towers, 44 Bala Sundaram Road, COIMBATORE 641018 21 88 35

Plot No. 58, Neelam Bata Road, NIT, FARIDABAD 121001 42 82 60

Savitri Complex, 116 G.T. Road, GHAZIABAD 201001 471 19 98

53/5 Ward No:29, R.G. Barua Road, 5th By-lane, Apurba Sinha Path, GUWAHATI 781003 54 11 37

5-8-56C, L.N. Gupta Marg, Nampally Station Road, HYDERABAD 500001 320 10 84

E-52, Chitranganj Marg, C- Scheme, JAIPUR 302001 37 38 79

117/418 B, Sarvodaya Nagar, KANPUR 208005 21 68 76

Seth Bhawan, 2nd Floor, Behind Leela Cinema, Naval Kishore Road, LUCKNOW 226001 21 89 23

NIT Building, Second Floor, Gokulpat Market, NAGPUR 440010 52 51 71

Patliputra Industrial Estate, PATNA 800013 26 28 08

First Floor, Plot Nos. 657-660, Market Yard, Gultekdi, PUNE 411037 426 86 59

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T.C. No. 14/1421, University P. O. Palayam, THIRUVANANTHAPURAM 695034 32 21 04

*Sales Office is at 5 Chowringhee Approach, P.O. Princep Street, CALCUTTA 700072 237 10 85

†Sales Office is at Novelty Chambers, Grant Road, MUMBAI 400007 309 65 28

‡Sales Office is at 'F' Block, Unity Building, Narashimaraja Square, BANGALORE 560002 222 39 71