

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

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 3537 (1966): Ready mixed paint, finishing, interior, for general purposes, to Indian Standard Colours No.101, 216, 217, 219, 275, 281, 352, 353, 358 to 361, 363, 364, 388, 410, 442, 444, 628, 631, 632, 634, 693, 697, white and black [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 : 3537 - 1966
(Reaffirmed 2009)

(Alternative to IS : 129 - 1950,
IS : 133 - 1965. IS : 641 - 1954,
IS : 870 - 1962 and IS : 871 - 1956)

Indian Standard
SPECIFICATION FOR
READY MIXED PAINT, FINISHING,
INTERIOR, FOR GENERAL PURPOSES,
TO INDIAN STANDARD COLOURS

BLUE

No. 101 Sky Blue

GREEN

No. 216 Eau-de-Nil
No. 217 Sea Green
No. 219 Sage Green
No. 275 Opaline Green
No. 281 Apple Green

YELLOW, CREAM AND BUFF

No. 352 Pale Cream
No. 353 Deep Cream
No. 358 Light Buff
No. 359 Middle Buff
No. 360 Deep Buff
No. 361 Light Stone

No. 363 Dark Stone
No. 364 Portland Stone
No. 388 Biege

BROWN AND PINK

No. 410 Light Brown
No. 442 Light Salmon Pink
No. 444 Terra Cotta

GREY

No. 628 Silver Grey
No. 631 Light Grey
No. 632 Dark Admiralty Grey
No. 634 Slate
No. 693 Aircraft Grey
No. 697 Light Admiralty Grey

WHITE AND BLACK

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(Incorporating Amendment No. 1)

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INDIAN STANDARDS INSTITUTION

MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

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May 1966

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(Alternative to IS : 129-1950,
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0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 12 April 1966 as an emergency standard. After the original standard had been reviewed by the Paints and Allied Products Sectional Committee and approved by the Chemical Division Council, the emergency character of this standard was removed through Amendment No. 1.

0.2 This standard was originally issued as IS : 3537E-1966 in accordance with the simplified emergency procedures to meet the urgent needs of the country. It was issued as an alternative to the following standards:

IS : 129-1950 Specification for ready mixed paint, brushing, finishing, interior, oil gloss, for general purposes, to Indian Standard colours

IS : 3537 - 1966

IS : 133-1965 Specification for enamel, interior (a) undercoating, (b) finishing, colour as required (*revised*)

IS : 641-1964 Specification for ready mixed paint, brushing, finishing, interior, semi-gloss, for general purposes, white (*revised*)

IS : 870-1962 Specification for ready mixed paint, brushing, finishing, egg shell gloss, for interior use, to Indian Standard colours

IS : 871-1956 Specification for ready mixed paint, brushing, finishing, egg shell gloss, for interior use, to Indian Standard colours

It was prepared with the assistance of an *ad hoc* Consultative Group composed of representatives of Ministry of Defence; Directorate General of Supplies and Disposals; Ministry of Railways; Indian Paint Association; and other manufacturers, technologists and testing authorities under the convenership of Shri K. N. R. Sharma, Development Officer (Paints), Directorate General of Technical Development, New Delhi.

0.2.1 This standard is expected to help not only in easing the stringent foreign exchange position by replacing imported raw materials with alternative indigenous products but would also economize the use of indigenous raw materials, such as drying oils, which may thus be released for export. In this standard, use of lead and zinc pigments has been eliminated. An amended list of colours now possible under this specification has been given. Restriction in the range of choice of colours to 26 shades, for internal consumption only, has been attempted in order to promote conservation of raw materials, optimization of production and necessary import substitution through rationalization of the requirements of the consumer. As material to this specification may be produced in different types of finish (gloss, semi-gloss, egg shell and matt) while indenting, type of finish required shall be specifically stated.

0.3 This standard contains clause **3.5** which calls for an agreement between the purchaser and the supplier.

0.4 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*).

1. SCOPE

1.1 This standard prescribes the requirements and the methods of sampling and test for ready mixed paint, finishing, interior, for general purposes, with distinctive colours as specified in the title.

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 of such a composition as to satisfy the requirements of this standard.

3.1.1 Zinc oxide and white lead shall not be used.

3.2 The material shall also 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 Weight in kg/10 litres— The weight in kg/10 litres of the material, when tested in accordance with **25** of IS : 101-1964*, shall be within ± 3 percent of the sample approved against the specification, if any.

3.5 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 the 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.

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.

*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,
FINISHING, INTERIOR, FOR GENERAL PURPOSES,
TO INDIAN STANDARD COLOURS**
(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:		
	a) Surface dry	Not more than 4 hours	} 7.1, 7.2 & 7.3
	b) Hard dry	Not more than 12 hours	
	c) Tack free	Not more than 24 hours	
ii)	Consistency	Smooth and uniform, suitable for brushing or spraying, as required	7.4
iii)	Finish	Smooth and glossv, semi-glossv, egg shell or mass, as required	7.5
iv)	Colour	Close match to the specified IS colour	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 96 h air-drying	No visible damage or detachment of film	16
viii)	Stripping test	Scratches free from jagged edges	17
ix)	Resistance to water (after immersion in water for 24 h)	Gloss retention shall be not less than 60 percent of the gloss of the unimmersed portion	23
x)	Flash point	Not below 30°C	24
xi)	Keeping properties	Not less than one year	31

*Methods of test for ready mixed paints and enamels (*Second revision*).
†This test is applicable only to glossy finishes.

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 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 as prescribed in IS : 101-1964*. References to the relevant clauses of IS : 101-1964* are given in **3.3, 3.4, 3.5** and 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.

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

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

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

INTERNATIONAL SYSTEM OF UNITS (SI UNITS)

Base Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Length	metre	m
Mass	killogram	kg
Time	second	s
Electric current	ampere	A
Thermodynamic temperature	kelvin	K
Luminous Intensity	candela	cd
Amount of substance	mole	mol

Supplementary Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>
Plane angle	radian	rad
Solid angle	steradian	sr

Derived Units

<i>Quantity</i>	<i>Unit</i>	<i>Symbol</i>	<i>Conversion</i>
Force	newton	N	1 N = 1 kg.1 m/s ²
Energy	joule	J	1 J = 1 N.m
Power	watt	W	1 W = 1 J/s
Flux	weber	Wb	1 Wb = 1 V.s
Flux density	tesla	T	1 T = 1 Wb/m ²
Frequency	hertz	Hz	1 Hz = 1 c/s (s ⁻¹)
Electric conductance	siemens	S	1 S = 1 A/V
Pressure, stress	pascal	Pa	1 Pa = 1 N/m ²

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