

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 337 (1975): Varnish, finishing interior [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”

BLANK PAGE



Indian Standard
**SPECIFICATION FOR
VARNISH, FINISHING, INTERIOR**
(First Revision)

Second Reprint SEPTEMBER 1993

UDC 667.638.6

© Copyright 1975

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

Indian Standard

SPECIFICATION FOR VARNISH, FINISHING, INTERIOR (First Revision)

Paints and Allied Products Sectional Committee, CDC 8

Chairman

SHRI T. K. S. MANI

Representing

Addisons Paints & Chemicals Ltd, Madras

Members

SHRI M. B. SATYANARAYANA (*Alternate to*
Shri T. K. S. Mani)

SHRI BALJIT SINGH Bhagsons Paint Industries (India), New Delhi

SHRI HARDIP SINGH (*Alternate*) National Test House, Calcutta

DR A. S. BHADURI

SHRI K. C. SEAL (*Alternate*)

DR P. K. BHANDARI Shalimar Paints Ltd, Calcutta

SHRI N. S. BHARATTA Blundell Eomite Paints Ltd, Bombay

SHRI S. H. DESAI (*Alternate*)

SHRI C. J. BHUMKAR Asian Paints (India) Ltd, Bombay

SHRI A. K. CAPRIHAN Indian Aluminium Co Ltd, Calcutta

SHRI J. K. ANAND (*Alternate*)

SHRI K. N. CHOWDHARI Ministry of Defence (DGI)

SHRI S. K. MAITRA (*Alternate*)

SHRI N. G. S. IYER Directorate General of Supplies & Disposals,
New Delhi

JOINT DIRECTOR (M & C) Railway Board (Ministry of Railways)

SHRI A. RAMAMURTHY (*Alternate*)

SHRI R. K. MARPHATIA Goodlass Nerolac Paints Ltd, Bombay

SHRI N. R. KOLWALKAR (*Alternate*)

SHRI M. N. RAO Indian Paint Association, Calcutta

SHRI B. V. DALAL (*Alternate*)

DR R. J. RATHI Raw Materials for Paint Industry Sectional
Committee, CDC 50, ISI

SHRI K. L. RATHI (*Alternate*)

SHRI O. P. RATNA National Buildings Organization, New Delhi

SHRI R. K. ROKADE The Premier Automobiles Ltd, Bombay

SHRI P. K. DESHPANDE (*Alternate*)

SHRI P. SATYANARAYANAN Development Commissioner, Small Scale Industries,
New Delhi

SCIENTIFIC ADVISER TO THE CHIEF Naval Headquarters, Ministry of Defence
OF THE NAVAL STAFF

(Continued on page 2)

© Copyright 1975

BUREAU OF INDIAN STANDARDS

This publication is protected under the *Indian Copyright Act* (XIV of 1957) and reproduction in whole or in part by any means except with written permission of the publisher shall be deemed to be an infringement of copyright under the said Act.

(Continued from page 1)

<i>Members</i>	<i>Representing</i>
SHRI K. N. R. SHARMA	Directorate General of Technical Development, New Delhi
SHRI KULTAR SINGH (<i>Alternate</i>)	
DR S. M. SINGH	Central Building Research Institute (CSIR), Roorkee
DR M. A. SIVASAMBAN	Regional Research Laboratory (CSIR), Hyderabad
SUPERINTENDING SURVEYOR OF WORKS (I)	Central Public Works Department, New Delhi
SURVEYOR OF WORKS (I) (<i>Alternate</i>)	
SHRI Y. S. SWAMY	The Alkali & Chemical Corporation of India Ltd, Calcutta
SHRI S. BHATTACHARYYA (<i>Alternate</i>)	
DR G. M. SAXENA, Director (Chem)	Director General, ISI (<i>Ex-officio Member</i>)
<i>Secretary</i>	
SHRI R. K. SINGH	
Assistant Director (Chem), ISI	

Panel for Varnishes and Bituminous Finishes, CDC 8 : 6 : 8

<i>Convener</i>	
SHRI S. H. DESAI	Blundell Eomite Paints Ltd, Bombay
<i>Members</i>	
DR K. P. BUCH	Ministry of Defence
SHRI Y. P. S. NIRWAN (<i>Alternate</i>)	
CHEMIST & METALLURGIST-II	Railway Board (Ministry of Railways)
SHRI R. B. GOYAL	Asian Paints (India) Ltd, Bombay

Ad hoc Panel of Bombay Region, CDC 8 : 6 : 12

<i>Convener</i>	
SHRI R. K. MARPHATIA	Goodlass Nerolac Paints Ltd, Bombay
<i>Members</i>	
SHRI C. J. BHUMKAR	Asian Paints (India) Ltd, Bombay
DEPUTY DIRECTOR (CHEM)	National Test House, Bombay
SHRI S. H. DESAI	Blundell Eomite Paints Ltd, Bombay
DR A. B. GERSAPPA	Bombay Paints & Allied Products Ltd, Bombay
MANAGING DIRECTOR	Mercury Paints & Varnishes Ltd, Bombay
	Noble Paints & Varnish Co Ltd, Bombay

Indian Standard
SPECIFICATION FOR
VARNISH, FINISHING, INTERIOR
(*First Revision*)

0. FOREWORD

0.1 This Indian Standard (First Revision) was adopted by the Indian Standards Institution on 31 March 1975, 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 1952 and was largely based on the interim coordinated draft produced with the assistance of the representatives of manufacturers and of various departments and authorities of the Government of India, by the coordinating Subcommittee of the No. 5 Standing Committee on Specifications for Paint and Allied Stores of the General Headquarters, India (now Army Headquarters).

0.3 In this revision, which has been prepared based on the recommendations of an *Ad hoc* Panel specially set up for review of Indian Standards for paints, the requirement for maximum acid value has been modified from 25 to 15. The material according to this revised standard shall be of one type only as against two classes in the earlier version. The test for scratch hardness on the panels prepared with the material shall be carried out only by a mechanical tester. Amendments No. 1 and 2 to this standard have been incorporated in this revision.

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.

1. SCOPE

1.1 This standard prescribes requirements and methods of sampling and test for the material commercially known as varnish, finishing, interior. The material is used for the protection and decoration of interior work, generally on wooden surfaces.

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

2. TERMINOLOGY

2.1 For the purpose of this standard, the definitions given in IS : 6667-1972* and IS : 197-1969† shall apply.

3. REQUIREMENTS

3.1 Description — The material shall be clear, transparent and free from foreign matter, sediment and undissolved water.

3.2 Composition — The material shall be based on resins, drying oils, driers and thinners in suitable proportions to satisfy the requirement of this standard.

3.3 Resistance to Water — When tested as prescribed in 23 of IS : 101-1964‡ with 24 hours immersion, the film of the material shall pass the test.

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

4. PACKING

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

5. MARKING

5.1 Each container shall be marked with the following:

- a) Name of the material;
- b) Name of the manufacturer and/or his recognized trade-mark, if any;
- c) Volume of the material;
- d) Month and year of manufacture; and
- e) Batch No. or lot No. in code or otherwise.

5.1.1 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.

*Glossary of terms used in synthetic resin industry.

†Methods of sampling and test for varnishes and lacquers (*first revision*).

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

TABLE 1 REQUIREMENTS FOR VARNISH, FINISHING, INTERIOR

(Clause 3.4)

SL No.	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST (REF TO CL NO. IN IS : 197-1969*)
(1)	(2)	(3)	(4)
i)	Drying time, <i>Max</i> :		7.2
	a) Surface dry	6 hours	
	b) Hard dry	18 hours	
	c) Tack free	24 hours	
ii)	Finish	Smooth and glossy	8
iii)	Colour	Not darker than a combination of 41 yellow units and 10 red units	9
iv)	Scratch hardness (on a mechanical tester)	No such scratch as to show the bare metal	10
v)	Flexibility and adhesion	No visible damage or detachment of film	11 (Method 1)
vi)	Stripping test	Scratched free from jagged edges	12
vii)	Flash point, <i>Min</i>	30°C	13
viii)	Volatile matter content, percent by mass, <i>Max</i>	50.0	15
ix)	Viscosity in stokes at 30°C	1.0 to 2.0	17
x)	Acid value, <i>Max</i>	15.0	18
xi)	Keeping properties	Not less than one year from the date of manufacture	20

*Methods of sampling and test for varnishes and lacquers (*first revision*).**6. SAMPLING**

6.1 Representative samples of the material shall be prepared as prescribed under 3 of IS : 197-1969*.

7. TEST METHODS

7.1 Tests shall be conducted as prescribed in IS : 101-1964† and IS : 197-1969*. References to relevant clauses of IS : 101-1964† are given in 3.3 and those of IS : 197-1969* in col 4 of Table 1.

*Methods of sampling and test for varnishes and lacquers (*first revision*).†Methods of test for ready mixed paints and enamels (*second revision*).

7.2. 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.

8. CRITERIA FOR CONFORMITY

8.1 A lot shall be declared as conforming to the requirements of this standard if the test results of the composite samples satisfy the requirements prescribed under 3.

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

BUREAU OF INDIAN STANDARDS

Headquarters :

Manak Bhavan, 9 Bahadur Shah Zafar Marg, NEW DELHI 110002

Telephones : 331 01 31

331 13 75

Telegrams : Manaksanstha

(Common to all Offices)

Regional Offices :

	Telephone
Central : Manak Bhavan, 9, Bahadur Shah Zafar Marg, NEW DELHI 110002	{ 331 01 31 331 13 75
* Eastern : 1/14 C.I.T. Scheme VII M, V.I.P. Road, Maniktola, CALCUTTA 700054	37 86 62
Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036	53 16 40
Southern : C.I.T. Campus, IV Cross Road, MADRAS 600113	235 23 15
† Western : Manakalaya, E9 MIDC, Marol. Andheri (East). BOMBAY 400093	632 92 95

Branch Offices :

'Pushpak', Nurmohamed Shaikh Marg, Khanpur, AHMADABAD 380001	2 63 48
† Peenya Industrial Area, 1st Stage, Bangalore-Tumkur Road. BANGALORE 560058	39 49 55
Gangotri Complex, 5th Floor, Bhadbhada Road, T.T. Nagar. BHOPAL 462003	55 40 21
Plot No. 21, Satyanagar, BHUBANESHWAR 751007	40 36 27
Kalai Kathir Building, 6/48-A Avanasi Road, COIMBATORE 641037	21 01 41
Plot No. 43, Sector 16A, Mathura Road, FARIDABAD 121001	8-28 88 01
Savitri Complex, 116 G. T. Road, GHAZIABAD 201001	8-71 19 96
53/5 Ward No. 29, R.G. Barua Road, 5th By-lane, GUWAHATI 781003	4 11 37
5-8-56C L. N. Gupta Marg, (Nampally Station Road) HYDERABAD 500001	20 10 83
R14 Yudhister Marg, C Scheme, JAIPUR 302005	52 13 74
117/418 B Sarvodaya Nagar, KANPUR 208005	21 68 76
Plot No. A-9, House No. 561/63, Sindhu Nagar, Kanpur Road, LUCKNOW 226005	5 55 07
Patliputra Industrial Estate, PATNA 800013	26 23 05
C/o Smt. Sunita Mirakhar, 66 D/C Annexe, Gandhi Nagar, JAMMU (TAWI) 180004	—
T. C. No. 14/1421, University P. O., Palayam. THIRUVANANTHAPURAM 695034	6 21 04
Inspection Offices (With Sale Point) :	
Pushpanjali. First Floor, 205-A West High Court Road. Shankar Nagar Square, NAGPUR 440010	52 51 71
Institution of Engineers (India) Building, 1332 Shivaji Nagar. PUNE 411005	5 24 35
*Sales Office Calcutta is at 5 Chowringhee Approach. P. O. Princep Street, CALCUTTA	27 99 65
† Sales Office is at Novelty Chambers, Grant Road, BOMBAY	309 65 28
‡ Sales Office is at Unity Building, Narasimharaja Square. BANGALORE	22 39 71