



**उत्पाद मैनुअल
पलस्तर हेतु रेत,
आई एस 1542 : 1992 के अनुसार**

**PRODUCT MANUAL FOR
SAND FOR PLASTER
ACCORDING TO IS 1542:1992**

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो) अनुरूपता मूल्यांकन (विनियम, 2018 की योजना -I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	मानक संख्या IS No.	:	IS 1542 : 1992
	शीर्षक Title	:	Sand for Plaster
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Nil Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/ Factory Surveillance
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	One Sample of each variety, i.e. Natural Sand/ Crushed Stone Sand/ Crushed Gravel Sand, shall be tested separately to cover that variety of sand in the Scope of Licence
c)	नमूने का परिमाण Sample Quantity	:	Sand for Plaster – 25 kg Note: This section indicates the quantity of the sample of the product and/or the raw material (if applicable), required to be sent to the laboratory for testing, for the purpose of Grant of Licence/Change in Scope of Licence/ Factory Surveillance (incase of market surveillance, effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)

d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर Parameters to be Declared in Test Request	-	Same as the scope of licence
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer to Annex-A
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer to Annex-B
5.	एक दिन में संभावित परीक्षण Possible tests in a day		
	(i) Limits of Deleterious Materials (Clause 4.3) - Clay, Silt and dust (ii) Grading of Sand (Clause 5) Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	लाइसेंस का दायरा /Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 1542 : 1992 with the following scope:		
	Name of the product	Sand for Plaster	
	Variety of Sand	Natural Sand/ Crushed Stone Sand/ Crushed Gravel Sand	

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ANNEX-A

List of Test Equipment

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl No.	Tests used in with Clause Reference	Test Equipment
1	Limits of Deleterious Materials (Clause 4.3)	<u>Clay, silt and dust:</u> -Water tight screw-topped glass jar -device for rotating the jar @ 80 ± 20rpm -Sedimentation pipette of the Andreason type of approximately 25 ml capacity (as per fig. 1 of IS 2386 Part 2) -1000ml measuring cylinder. -Weighing balance of capacity not less than 10 kg, Accuracy 1 g -Weighing balance of capacity not less than 250 g, Accuracy 0.001 g -Ventilated oven, thermostatically controlled to maintain a temperature of 100 to 110°C <u>Chemicals</u> -Sodium oxalate -Distilled water <u>Organic impurities</u> -350ml graduated clear glass medicine bottle -350ml bottle, stopper <u>Chemicals</u> -Sodium hydroxide -Tannic acid -Alcohol
2	Compressive Strength (Clause 4.4) and Determination of Flow (Clause 4.4.1)	-Weighing balance 2000g, Accuracy 2g -Cube Moulds 50mm -Mixing Apparatus as per A-2.3 of appendix A, IS 2250 -Mixer -Paddle -Tamping Rod - 25 mm square and 200 mm long. -Trowel - Steel blade 100 to 150 mm -Scraper -Humidity chamber, 90% RH, <u>Min.</u> -Room condition $27 \pm 2^\circ\text{C}$, <u>Min.</u> -Curing tank $27 \pm 2^\circ\text{C}$ - Compressive strength Machine, 25kN, LC-1N -Flow table as per IS 5512 -Standard cone weighing 300 ± 2 g, 150 mm in height, diameter at base-75 mm

		-Conical container 180 mm deep, diameter at top of 150 mm
3	Grading of Sand (Clause 5)	-IS Sieves, 10mm, 4.75mm, 2.36mm, 1.18mm, 600 micron, 300 micron, 150 micron. -Sieve shaker -Weighing balance, 2000g, LC 0.01g -Oven 110°C
4	Specific gravity of sand (Clause 7.2 a)	-Pycnometer -Weighing balance-3kg, LC 0.05g -Oven 100 to 110°C -Vessel-Capable of holding 0.5 to 1kg of material Accuracy $\pm$ 0.05ml -Tray of area not less than 325cm ² - Digital Balance or Calibrated Jar/Cylinder -Washing bottle
5	Bulk Density (Clause 7.2 b)	-Balance -Cylindrical Metal Measure -Tamping Rod

ANNEX C

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 The manufacturers (licensees/applicants) will implement a Quality Assurance Plan i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall comply with the Quality Assurance Plan which defines the control unit (i.e. lot/batch etc.) and the levels of control as given in Table 1 (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and maintain test records in accordance with para 2.4.

1.3 LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 The definition of control unit is : All sand for plaster of the same variety manufactured in continuous production schedule in a day shall constitute a control unit.

1.3.2 The levels of control are given in **Table 1**. The manufacturer shall ensure inspection and testing as per the levels of control recommended in column 3 of Table 1. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2 ENSURING COMPLIANCE THROUGH TESTING- The manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In-house testing facility) for testing those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.3 TEST RECORDS- The manufacturers maintaining an in-house laboratory shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory, test reports issued by the laboratories shall be available for inspection by BIS.

3 PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be marked on each bag of sand, provided always that the product so marked conforms to all requirements of the specification.

3.1 Sand for plaster shall be packed and supplied in bags only. Each bag of sand shall be legibly and indelibly marked with the following information:

- (i) Manufacturer's name and his registered trademark
- (ii) Net quantity, in kg
- (iii) Batch/Control unit number
- (iv) Address of the manufacturer

(v) Month & year of packing

(vi) Variety of Sand

3.2 Additional Marking requirements: The product shall also be marked with the following additional requirement on each bag of sand for plaster:

a) “For BIS certification details please visit www.bis.gov.in”

3.3 When requested by the purchaser or his representative, the manufacturer shall furnish additional information as per Clause 7 of IS 1542:1992.

4 REJECTION - All the production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act,2016.

TABLE 1

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Recommended Levels of Control		
Clause	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
4.1	General	4.1	IS 1542	R	Firm to have adequate in-process controls to check compliance of this parameter as per the tolerances given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity		
4.2	Deleterious Materials	4.2	IS 1542	R			
4.3	Limits of Deleterious Materials -						
	(i) Clay, Silt, Dust	3	IS 2386 (Part 2)	R	One	Each control unit	-
	(ii) Organic impurities	6	IS 2386 (Part 2)	R	One	Once in a week for each Type of sand for plaster produced during the period.	
4.4	Compressive Strength	Appendix-A	IS 2250	R	One	Each control unit	-
5	Grading of Sand	2	IS 2386 (Part 1)	R	One	Each control unit	-
7.2	Specific gravity of sand	2.4	IS 2386 (Part 3)	S	One	Each control unit	Option requirements (when required by the purchaser or his representative)
7.2	Bulk Density	3	IS 2386 (Part 3)	S			