



उत्पाद मैनुअल
खिड़की के फ्रेम पर उपयोग के लिए पुट्टी – विशिष्टि
419: 2023 के अनुसार

**PRODUCT MANUAL
FOR PUTTY FOR USE ON WINDOW
FRAMES — SPECIFICATION
ACCORDING TO IS 419: 2023**

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 419 : 2023
	शीर्षक Title	:	PUTTY FOR USE ON WINDOW FRAMES — SPECIFICATION खिड़की के फ्रेम पर उपयोग के लिए पुट्टी- विशिष्टि
	संशोधनों की संख्या No. of amendments	:	0
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	The material shall consist of mainly whiting and linseed oil (see IS : 75) if necessary, varnish and suitable additives may be added in the formulation of putty (Please refer to Cl 4.2 of the IS) 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	:	NA
c)	नमूने का परिमाण Sample Quantity	:	2 pack of 1kg 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)
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		
	All tests possible in a day 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 ready reference 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 419 : 2023 with the following scope:		
	Name of the product	खिड़की के फ्रेम पर उपयोग के लिए पुट्टी PUTTY FOR USE ON WINDOW FRAMES	

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ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests Used In With Clause Reference	Test Equipment/Chemical
1	Composition (Calcium carbonate) Cl 4.2.1	Standard Potassium Permanganate Bromine Water Ammonium Oxalate Solution Dilute Hydrochloric Acid Steam Bath, Filter Paper, Beaker
2	Consistency, Setting time, Cl 4.3.1	Palette Knife, Apparatus as per Fig 1 of IS 419:2023, Metal Panels of 60 mm × 60 mm size
3	Lead Restriction Cl. 4.4	<u>Electrolysis Method</u> Reagents, Ammonium nitrate, copper sulphate, Nitric acid, hydrogen peroxide Equipment: Electrolysis apparatus with platinum gauze anode, Silica Basin, Muffle Furnace (for ashing the paint), Weighing Balance, , Drying/Air Oven, beakers and other laboratory glassware, desiccator <u>Molybdate method</u> Reagent: Dilute Nitric Acid, Ammonium Acetate Solution (lead free), Dilute Sulphuric Acid, Conc. Sulphuric Acid, ethyl alcohol, paper pulp pad, glacial acetic acid, ammonium para molybdate, porcelain filtering crucible, ammoniacal 2 percent ammonium nitrate solution Equipment : Oven, muffle furnace, hot plate <u>Sulphide method</u> Hydrochloric acid, containing 0.25 percent by mass of Hydrogen chloride, Water Bath, No. 42 Whatman Filter Paper, 500 ml evaporating basin, sand-bath, Kipp's apparatus (for evolving H₂S gas) (IS Hydrogen Sulphide Gas, Hydrogen Sulphide Water Equipment: Mechanical shaker, oven <u>Atomic Absorption Spectroscopy</u> Atomic absorption spectrophotometer, Muffle furnace, hot plate, Standard solution <u>Inductively Coupled Plasma-Optical emission Spectrometry</u> inductively coupled plasma optical (or atomic) emission spectrometer (ICP-OES or ICP-AES) Electric hot plate Microwave extraction apparatus Analytical balance,

4	Residue on sieve Cl. 4.5, 4.6 and 7.1	Brush - Camel hair Oven - Capable of being maintained at 105 +/-2°C. Analytical Balance - Accurate to 0.1 mg or better. Desiccator - Containing an efficient desiccant. Sieve Watch glass
5	Water Content Cl. 4.5,4.6 and 7.1	DEAN AND STARK METHOD Apparatus as per Cl of IS 1211 : 2022 Dry Toluene Ethyl Acetate or Amyl Acetate KARL FISCHER METHOD Desiccator Karl Fischer reagent

ANNEX B

SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that 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 define a Quality Assurance Plan defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : All the finished material produced in a batch.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

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

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least 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.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. 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 or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster based facilities as per guidelines for the utilization of cluster based test facilities by MSMEs or the provisions of Sharing of testing facilities or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, 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 incorporated legibly and indelibly on each container provided always that the material in each container on which this Mark is thus applied, conforms to each requirement of the specification.

3.1 Packing and Marking shall be done as per the Indian Standard.

3.2 Additional Marking requirements: The material shall also be marked with the following additional requirement on labels affixed to each container

- a) “For BIS certification details please visit www.bis.gov.in”
- b) *Any other requirement not specified in the Indian Standard*

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
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or)S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
4.1	Form and Condition	-	IS 419:2023	R	Firm to have adequate in-process controls to check compliance of this parameter. Appropriate records shall be maintained by the manufacturer for evidence of conformity		
4.2	Composition	-	IS 419:2023	R			
4.2.1	Calcium Carbonate Content	Annex -B	IS 419:2023	R	One	Each control unit	
4.3	Consistency	-	419:2023	R	Firm to have adequate in-process controls to check compliance of this parameter. Appropriate records shall be maintained by the manufacturer for evidence of conformity		
4.3.1	Setting time	Annex-C	IS 419:2023	R	One	Once a week	
4.4	Lead Restriction	-	IS 101 (Part 8/Sec 5)	R	One	Whenever there is change in consignment/batch of raw material	
4.5,4.6	Residue on sieve	-	IS 101 (Part 8/Sec 1)	R	One	Each control unit	
4.5,4.6	Water Content	-	IS 101 (Part 2/Sec 1)	R	One	-do-	
4.6	Keeping Properties	-	419:2023	R	One	Every six months	