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उत्पाद मानुयल
GYPSUM FOR AGRICULTURAL USE
IS 6046: 2023 के अनुसार
PRODUCT MANUAL FOR
GYPSUM FOR AGRICULTURAL USE
ACCORDING TO IS 6046: 2023

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में अभ्यास और पारदर्शिता के संचालन में पारदर्शिता सुनिश्चित करने 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 लाइसेंस/प्रमाणपत्र 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 coherence 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 licence/certificate.

1.	उत्पाद Product	:	IS 6046: 2023
	शीर्षक Title	:	Gypsum for Agricultural Use
	संशोधनों की संख्या No. of amendments	:	Nil
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	No specific requirements
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Sample of each grade shall be tested.
c)	नमूने का आकार Sample Size	:	1 kg
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	कृ पया Annex-A देखें Please see Annex – A
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	कृ पया Annex-B देखें Please see Annex – B

5.	एक दिन में संभावित परीक्षण Possible tests in a day	
	i. Fineness, ii. Calcium sulphate content iii. Sodium content	
6.	लाइसेंस का दायरा /Scope of the Licence:	
	Licence is granted to use Standard Mark as per IS 6046: 2023 with the following scope:	
	Name of the product	Gypsum for Agricultural Use
	Grade(s)	Grade 1; and/or Grade 2; and/or Grade 3

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ANNEX – A
TO THE PRODUCT MANUAL FOR
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List of test equipment

Major test equipment required to test as per the Indian Standard

Sr. No.	Tests used in with Clause Reference	Test equipment
1.	Fineness Clause 2.1	2 mm sieve 0.25 mm (60 mesh) sieve Digital Weighing balance Isopropyl alcohol Oven Mechanical shakerBrush Glazed paper
2.	Calcium sulphate content Clause 2.2(Appendix A of IS 6046	For Calcium- Ammonium acetate Acetic Acid Ammonium Chloride Ammonium Hydroxide Ammonium Oxalate (Pure) Bromophenol blue indicator Hydrochloric acid (conc). Nitric Acid (conc.) Ammonium hydroxide (dil.) Hydrochloric acid (dil.) Potassium permanganate sol. (dil.0 Sulphuric acid (dil.) Methyl red indicator Standard Potassium permanganate sol. 1.0 mm sieve Oven Desiccator Weighing balance Hot plate Thermometer Porcelain dish Petri dish Filter paper Conical flask Beaker Burette Pipette For Sulphate-

		Barium chloride Nitric acid (conc.) Sulphuric acid (conc.) Hydrochloric acid (dil.) Weighing balance Hot plate Water bath Muffle furnace (capable of maintaining temp of 700°C) Desiccator Filter paper (Whatman No. 42)
3.	Sodium content Clause 2.3 (Appendix B of IS 6046)	Gravimetric method – Ammonium carbonate Ammonium hydroxide Barium chloride Conc. Hydrochloric acid Ethanol Magnesium uranyl acetate Hot plate Thermometer Perchloric acid Ethanol, Weighing balance Filter paper Porcelain dish Glass pestle Sintered glass crucible Oven Desiccator Flame Photometer method Flame photometer Nitric acid Deionized distilled water Sodium chloride (AR grade) Oven Desiccator 5 No of 100 ml Flask 250 ml Flask

The above list is indicative only and may not be treated as exhaustive

ANNEX - B
TO THE PRODUCT MANUAL FOR
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Scheme of Inspection And Testing

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare and implement a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING – The Standard Mark, as given in the Schedule of the licence, shall be printed using suitable ink by flexography or gravure printing or stencilling on each container of the product, provided always that the product so marked conform to requirements of the specification.

3.1 PACKING - The material shall be packed in bulk or in packages as per provisions of clause 4.1 of IS 6046:2023.

3.2 MARKING - The information as mentioned under clause 4.2 of IS 6046:2023 shall be legibly and indelibly marked on each package. In addition, the following shall be incorporated on each package:

i) BIS Licence No. (CM/L.....)

ii) For details of BIS certification details please visit www.bis.gov.in’.

4. CONTROL UNIT – For the purpose of this scheme, the entire quantity of product of the same grade manufactured at one time from a particular charge of raw material shall constitute a control unit.

5. LEVELS OF CONTROL – The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – 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 (Levels of Control)
(Para 5 of Scheme of Inspection and Testing)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub- contracting permitted	Levels of Control		
Cl.	Requirement	Test Method Cl. Ref.	Test Method IS		No. of Sample	Frequency	Remarks
2.1	Fineness	3	IS 1288	R	One	Every four hourly	-
2.2	Calcium sulphate content	Annex B	IS 6046	R	One	Each control unit	-
2.3	Sodium content	Annex C	IS 6046	R	One	do	-

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.