



उत्पाद मैनुअल
एल्युमिनो फेरिक विशिष्ट
IS 260: 2024 के अनुसार

PRODUCT MANUAL
FOR ALUMINIUM SULPHATE, NON- FERRIC - SPECIFICATION
ACCORDING TO IS 260: 2024

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 260: 2024
	शीर्षक Title	:	एल्युमिनो फेरिक – विशिष्ट ALUMINIUM SULPHATE, NON- FERRIC-SPECIFICATION
	संशोधनों की संख्या No. of Amendments	:	NIL
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw Material	:	No Specific Requirement
b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Sample of Each Grade Shall be Drawn and Tested
c)	नमूने का परिमाण Sample Quantity	:	750 gms <i>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 (in case of market surveillance, effort may be made to procure the required quantity of product sample, as far as possible since raw material sample may not be available in market)</i>
d)	परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर	:	Grade

	Parameters to be Declared in Test Request		Note: Apart from the above, any other requirements/parameters may also be declared as per the standard, as applicable.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	कृपया Annex-A देखें Please Refer Annex –A
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	कृपया Annex-B देखें Please Refer Annex –B
5.	एक दिन में संभावित परीक्षण Possible Tests in a Day		
	All Tests 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:		
	IS 260: 2024 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कायिक्षेत्र के लिए प्रदान किया जाता है Licence is granted to use Standard Mark as per IS 260: 2024 with the following scope:		
	Name of the product	Aluminium Sulphate, Non- Ferric	
	Grade	1. Tech Grade 2. Pure Grade 3. AR Grade	

ANNEX-A
LIST OF TESTS EQUIPMENTS
(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sr. No.	Tests used in with Clause Reference	Test Equipment
1	Cl.4.2, Table 1, Sr. No. i, Insoluble Matter	Analytical Balance, IS sieve(1mm), Filter Paper, Glass Crucible, Stoppered Bottle, Oven, Sulphuric Acid
2	Cl.4.2, Table 1, Sr. No. ii, pH	Analytical Balance, pH meter, Glass electrodes, hot plate
3	Cl.4.2, Table 1, Sr. No. iii, Heavy Metals (as pb)	Analytical Balance, Nessler Cylinder, Volumetric flask, Pipette, Ammonium Hydroxide, Sodium Sulphide, Nitric Acid, Lead Nitrate or Instrumental Method: Atomic Absorption Spectrophotometer(AAS) or ICP-OES or ICP-MS
4	Cl.4.2, Table 1, Sr. No. iv, Iron compound (as Fe)	Analytical Balance, Stoppered Bottle, Nessler Cylinder, Pipette, Hydrochloric Acid, Ammonium Persulphate, Potassium Thiocyanate, n-butanol, Ferrous ammonium sulphate, Sulphuric acid, or Instrumental Method: Spectrophotometer or ICP-OES or ICP-MS
5	Cl.4.2, Table 1, Sr. No. v, Chlorides	Analytical Balance, Beaker, Pipette, Nitric Acid, Silver Nitrate, Glass Crucible or Instrumental Method: Ion Chromatography
6	Cl.4.2, Table 1, Sr. No. vi, Arsenic (as As ₂ O ₃)	Analytical Balance, Beaker, Pipette, apparatus as per IS 11124 or Instrumental Method: Atomic absorption spectrophotometer (AAS), ICP-OES or ICP-MS
7	Cl.4.2, Table 1, Sr. No. vii Ammonium Salts (as NH ₃)	Analytical Balance, Filter Paper, Beaker, Nessler cylinder, Pipette, Mercuric chloride, Potassium hydroxide, Glass bottle rubber stopper, Ammonium chloride, Sodium Hydroxide, Potassium iodide,
8	Cl.4.2, Table 1, Sr. No. viii, Aluminium compounds (as Al ₂ O ₃)	Gravimetric Method Analytical Balance, Volumetric flask, Beaker, Filter paper (Whatman No.40 or equivalent), Conical flask, Pipette, Ammonium Chloride Solid, Nitric Acid, Ammonium Hydroxide, Methyl Red Indicator, Ammonium Nitrate, crucible, Muffle Furnace Edta Method Disodium Ethylenediaminetetra Acetate (EDTA), Sulphuric Acid, Hexamine (Hexamethylenetetramine) Analar, Xylenol Orange Indicator, Lead Nitrate Solution, volumetric flask , Conical flask, Water Bath, Hot Plate, pH Meter. Instrumental test method ICP-OES or ICP-MS
9	Cl.4.2, Table 1, Sr. No. ix Sodium(Na)	Flame photometer

10	Cl.4.2, Table 1, Sr. No.x Potassium(K)	Flame photometer
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ANNEX – B SCHEME OF INSPECTION AND TESTING

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) 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 (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

2. RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

2.1.1 For the guidance of manufacturers, the recommended definition of control unit is : Aluminum Sulphate NON- FERRIC of one Grade manufactured at a time in a reaction vessel.

2.1.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**. Manufacturer has the discretion of declaring their own levels of control or accept the levels of control given in this document.

2.1.3 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.

3. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

3.1 TEST RECORDS- The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

4. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on each package of Aluminum Sulphate, NON-FERRIC or printed on the labels applied to the package provided always that the material so marked conforms to each requirement of the specification.

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

4.2 Additional Marking requirements: Additionally, the following shall also be marked on package/ labels:

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

5. REJECTION - 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 LEVELS OF CONTROL
(Recommended Levels Of Control By BIS- For Guidance Only)

(1)				(3)		
Test Details				Levels of Control		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remark
4.1	Description	4.1	IS 260	Manufacturer shall maintain adequate inspection and in process control, to ensure product meets specified requirements and maintain test records for tests involving Visual examination		
4.2 i	Insoluble Matter	B	-do-	One	Each control unit	
4.2 ii	pH (of 5 percent solution)	C	-do-	-do-	-do-	
4.2 iii	Heavy Metals (as Pb)	D or M	IS 260/ IS 12074/ IS 3025 (Part 65)	-do-	-do-	Applicable for Pure Grade & AR Grade
4.2 iv	Iron (as Fe)	E or M	IS 260/ IS 3025 (Part 65)	-do-	-do-	
4.2 v	Chlorides	F or N	IS 260	-do-	-do-	Applicable only for AR Grade
4.2 vi	Arsenic (as As ₂ O ₃)	G or M	IS 260/ IS 2088/ IS 11124/ IS 3025 (Part 65)	-do-	-do-	Applicable for Pure Grade & AR Grade

4.2 vii	Ammonium Salts (as NH ₃)	H		-do-	-do-	Applicable for Pure Grade & AR Grade
4.2 viii	Aluminium (as Al ₂ O ₃)	J or M	IS 260/ IS 3025 (Part 65)	One	-do-	-do-
4.2 ix	Sodium (as Na)	K	IS 260	-do-	Once in a month	Applicable only for AR Grade
4.2 x	Potassium (as K)	L	-do-	-do-	Once in a month	-do-