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उत्पाद मानुयल

पानी की गुणवत्ता सहिष्णुता के लिए भंडारण बैटरी - विशिष्टि

आई एस 1069 : 2021 के अनुसार

PRODUCT MANUAL FOR

QUALITY TOLERANCES FOR

WATER FOR STORAGE BATTERIES –SPECIFICATION

ACCORDING TO IS 1069 : 2021

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मैनुअल प्रमाणीकरण की संचालन रीति में सुसंगता और पारदर्शिता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप मे उपयोग किया जाएगा। बीआईएस लाइसेन्स/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग 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 1069 : 2021
	शीर्षक **Title**	:	पानी की गुणवत्ता सहिष्णुता के लिए भंडारण बैटरी - विशिष्टि QUALITY TOLERANCES FOR WATER FOR STORAGE BATTERIES –SPECIFICATION
	संशोधनों की संख्या **No. of Amendments**	:	NIL

2.	**नमूनाकरण दिशा निर्देश / Sampling Guidelines:**		
a)	**कच्चा माल** **Raw material**	:	No specific requirement
b)	**समूहीकरण दिशा निर्देश** **Grouping guidelines**	:	Not Applicable
c)	**नमूने का परिमाण** **Sample Size**	:	Composite Sample – About 8 litres collected from all the selected containers
3.	**परीक्षण उपकरणो की सूची** **List of Test Equipment**	:	कृप्या ANNEX – A देखें Please refer ANNEX – A
4.	**निरीक्षण व परीक्षण स्कीम** **Scheme of Inspection and Testing**	:	कृप्या ANNEX – B देखें Please refer ANNEX – B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day :**	:	All tests specified in the standard
6.	**लाइसेंस का कार्यक्षेत्र / Scope of the Licence:**		
	IS 1069 : 2021 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेंस निम्नलिखित कार्यक्षेत्र के लिए प्रदान किया जाता है | **Licence is granted to use Standard Mark as per IS 1069 : 2021 with the following scope :**		
	Name of the product	WATER FOR STORAGE BATTERIES	

ANNEX A
LIST OF TEST EQUIPMENTS
TO THE PRODUCT MANUAL FOR
QUALITY TOLERANCES FOR WATER FOR STORAGE BATTERIES – SPECIFICATION AS PER IS 1069 : 2021

Major Test Equipment required to test as per Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment	Chemicals and Reagents
1	pH (cl.3.2., Table 1)	**i)Electrometric Method** • pH meter – with glass and reference electrode (saturated calomel) • Magnetic stirrer with polytetrafluoro ethylene coated stirring bar • Thermometer • Beakers **ii)Colorimteric method** • Hard Glass Tube • Titration Apparatus • Beakers	• Standard pH Buffer solutions/tablets (minimum two, including pH 7) • Universal Indicator (Methyl Orange, Methyl Red, Bromethymol blue,Phenolpthalein) • Indicators (Sodium Hydroxide Solution, Rectified Spirit, Tropaeolin, Thmymolpthalein) • Distilled water • Borax (for Borax buffer) • Potassium dihydrogen phosphate, Sodium hydrogenphosphate and oven (for phosphate buffer) • Potassium hydrogen tartarate (for Tartarate buffer) Potassium hydrogen phthalate (for Phthalate buffer) Potassium tetraoxalate dihydrate (for Calcium hydroxide buffer) • Calcium Carbonate • Platinum dish, • Muffle furnace, • Hot Plate, Fritted glass filter of mediumporosity, polyethylene bottle Suction pump & fritted glassfunnel (for Tetra oxalate buffer)

			• Methyl orange, methyl red, bromothymol blue, phenolphthaleinand alcohol (66%) (for universal indicator) • Thymol blue indicator (acid range) Bromophenol blue indicator • Bromocresol green indicator Methyl red indicator • Bromocresol purple indicator Bromothymol blue indicator Phenol Red indicator • Cresol Red indicator • Thymol Blue (alkali range) indicator • Thymolphthalein indicator • Thymol violet indicator • Different buffer solutions of known pH
2.	Specific Electrical Conductivity at 25 ℃ (cl.3.2., Table 1)	• Instrument for measurement of electric conductivity equipped with flow type conductivity cell fitted with two or more electrodes • Cell constant 10 or less • Electrodes • Thermometer • Thermostatic bath • Stoppered Polyethylene Bottle	• Double distilled or deionized water • Potassium Chloride Standard Solution A, B and C • Platinizing solution

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

ANNEX B

SCHEME OF INSPECTION AND TESTING

TO THE PRODUCT MANUAL FOR QUALITY TOLERANCES FOR WATER FOR STORAGE BATTERIES – SPECIFICATION AS PER IS 1069 : 2021

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 equipment.

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

3. LABELLING AND MARKING – The Standard Mark as given in the Schedule of the license and Licence Number (i.e. CM/L……) shall be printed indelibly on each container of water for storage batteries in addition to the following details as per clause 4.2 of the standard:-

a) Name of the material;
b) Name and address of the manufacturer;
c) Quantity of material in the container;
d) Recognized trade-mark, if any;
e) Control Unit number

3.1 Packing shall be done as per the provisions of the Indian Standard. In addition, details of BIS website shall be marked as follows: "For details of BIS certification please visit www.bis.gov.in".

4. CONTROL UNIT – For the purpose of this scheme, the total quantity of water produced during the day and thoroughly homogenized shall be considered as a control unit.

4.1 On the basis of the tests and analysis results, decision regarding the conformity or otherwise of a control unit to the requirements of the specification shall be made.

4.2 If this sample fails in anyone or more of the requirements of the specification, the entire quantity of water represented by the Control Unit shall be considered unfit for the purpose of marking. The Control Unit, however, be reprocessed and the defect rectified. Such reprocessed material when tested again shall conform to all the requirements of the specification.

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**			**No. of Samples**	**Frequency**	**Remarks**
		Clause	**Reference**				
3.1	**Description**	3.1	IS 1069	R	One	Each ControlUnit	-----
3.2 & Table 1 Requirements							
i)	**pH**		IS 3025 (Part 11)	R	One	Each ControlUnit	-----
ii)	**Specific Electrical Conductivity at 25 ℃**		IS 3025 (Part 14)	R	Two	Each Control Unit	-----

Note-1: Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled 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 ofcontrol in column 3 with proper justification for approval by BO Head.