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**उत्पाद मानुयल
आईएसओ ब्यूटाइल अल्कोहल-विनिर्देश**

IS 9834: 1981 के अनुसार

PRODUCT MANUAL FOR

iso-BUTYL ALCOHOL-SPECIFICATION

ACCORDING TO IS 9834: 1981

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन (विनियम की स्कीम-I के तहत यह उत्पाद मानुयल प्रमाणीकरणके प्रचलन में रीति और पारदर्शिता के सुसंगत सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप में 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 9834: 1981
	शीर्षक Title	:	iso-BUTYL ALCOHOL-SPECIFICATION
	संशोधन संख्या No. of Amendments	:	NIL
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines:		
a)	कच्चा माल Raw material	:	No specific raw material requirement
b)	समूहिकरण दिशा निर्देश Grouping guidelines	:	NA
c)	नमूने का परिमाण Sample Size	:	1Kg
3.	परीक्षण उपकरणों की सूची निरीक्षण व परीक्षण स्कीम List of Test Equipment	:	Please refer ANNEX – A

4.	एक दिन में संभावित परीक्षण Scheme of Inspection and Testing	Please refer ANNEX – B
5.	लाइसेन्स का कार्यक्षेत्र /Possible tests in a day	All tests can be done in a day
6.	लाइसेंस का दायरा / Scope of the Licence:	
	IS 9834: 1981 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कार्यक्षेत्रके लिए प्रदान किया जाता है “Licence is granted to use Standard Mark as per IS 9834: 1981 with the following scope:	
	Name of the product	iso-BUTYL ALCOHOL

BUREAU OF INDIAN STANDARDS

Manak Bhawan, 9, Bahadur Shah Zafar Marg, New Delhi–
110002

ANNEX A
TO THE PRODUCT MANUAL FOR
iso-BUTYL ALCOHOL, TECHNICAL- SPECIFICATION
AS PER IS 9834:1981

List of Test Equipment

Major test equipment required to test as per the Indian Standard:

<u>Sr. No</u>	<u>Test & Clause</u>	<u>Test Equipment</u>
1.	Description, Cl. 2.1	Visual observation
2.	Colour, Hazen, Cl. 2.2, Table-1, Annex-2 or any other suitable instrumental method	Cobaltous Chloride hexahydrate, Hydrochloric acid, Chloroplatinic acid (Platinum & Aqua regia)
3.	Relative Density at 27°C/27°C, Cl. 2.2, Table-1, Annex-3	Relative Density Bottle, Water Bath (LC-0.1°C), Thermometer (LC-0.1°C or 0.2°C)
4.	Distillation Range, Cl. 2.2, Table-1, Annex-4	Distillation flask, Thermometer (LC-0.2°C), Draught Screen, Liebig condenser, Retort stand, Crow receiver.
5.	Residue on Evaporation, Cl. 2.2, Table-1, Annex-5	Platinum or Silica or Borosilicate glass evaporating dish, Oven (LC-1°C), Desiccator, Hot water bath
6.	Acidity (other than Carbon dioxide) (as CH₃COOH), Cl. 2.2, Table-1, Annex-6	Phenolphthalein, Rectified spirit, Sodium hydroxide, Distilled water
7.	Water Content, Cl. 2.2, Table-1, Annex-7	Methanol, Magnesium turnings, Iodine, Anhydrous Aluminium Sodium Silicate or activated silica gel, Ethylene Glycol Monomethyl ether, Pyridine, Acetic acid, Chloroform, Sulphur dioxide, Karl Fischer reagent, Sodium Tartarate- Crystalline, Silicon base grease, Automatic burette (10-25ml capacity), Titration vessel (100ml capacity), Reagent bottle for Karl Fischer reagent, Double Platinum electrode, Magnetic Stirrer with PTFE coated stirring bar, Electrometric end point detection device utilizing a micrometer, Glass syringe, Small glass tube

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

ANNEX B
TO THE PRODUCT MANUAL FOR
iso-BUTYL ALCOHOL-SPECIFICATION

AS PER IS 9834: 1981

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 equipment.

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

3. LABELLING, MARKING, PACKING - The Standard Mark as given in schedule of the licence and Licence Number (i.e. CM/L) shall be incorporated on the container with product and on the test certificate accompanied along with each consignment, and the marking and packing shall be done as per the provisions of the Indian Standard, provided always that the product thus marked conform to all the requirements of the specification. Each container shall have the caution label 'FLAMMABLE' together with the corresponding symbol for labelling of dangerous goods as per Fig. 5 of IS 1260 (Part 1).

4. CONTROL UNIT – For the purpose of this scheme, the quantity of the material produced from the same consignment of raw material in a day 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. TEST CERTIFICATE - For each consignment of BIS Certified material conforming to IS 9834: 1981 there shall be a test certificate which shall contain the Standard Mark, the Control Unit number and the corresponding test results (as given in Annexure-I enclosed)

7. REJECTIONS – Disposal of non-conforming product shall be done in such a way 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)

Sl No.	(1)				(2)	(3)		
	Test Details				Test equipment requirement R:required (or) S:Subcontracting permitted	Levels of Control		
	Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
			Clause	Reference				
1	2.1	Description	2.1	IS 9834	R	Firm to have adequate in-process controls to check compliance of this parameter as given in the Indian Standard. However, appropriate records shall be maintained by the manufacturer for evidence of conformity.		
2 (i)	2.2, Table 1	Colour	2.2	Annex-2 to IS 9834	R	One	Each Control Unit	-
(ii)	2.2, Table 1	Relative density at 27°C/27°C	2.2	Annex-3 to IS 9834	R	One	Each Control Unit	-
(iii)	2.2, Table 1	Distillation range	2.2	Annex-4 to IS 9834	R	One	Each Control Unit	-
(iv)	2.2, Table 1	Residue on Evaporation	2.2	Annex-5 to IS 9834	R	One	Each Control Unit	-
(v)	2.2, Table 1	Acidity (Other than CO ₂) (as CH ₃ COOH)	2.2	Annex-6 to IS 9834	R	One	Each Control Unit	-
(vi)	2.2, Table 1	Water content	2.2	Annex-7 to IS 9834	R	One	Each Control unit	-

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.

ANNEXURE I

(Para 6 of the Scheme of Inspection and Testing)

XYZ COMPANY

(Registered office Address and works address)

TEST CERTIFICATE

Iso-Butyl alcohol- Specification**as per IS 9834: 1981**BIS
STANDA
RD
MARK

TEST CERTIFICATE No.

DATE _____

To M/s _____

We certified that the material described below fully conforms to IS **9834: 1981**. Chemical composition and properties of the product, as tested in accordance with the Scheme of Testing and Inspection contained in the BIS Certification Marks Licence No.CM/L _____ are as indicated below against each order No.

(PLEASE REFER TO IS **9834: 1981** FOR DETAILS OF
SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order No.& Date	Control Unit No.	Quantity in tonnes	Description	Requirements						
				Colour	Relative density	Distillation range	Residue on evaporation	Acidity (other than CO ₂)(as CH ₃ COOH)	Water content	Remark

REMARKS

WAGON

NO.

TRUCK NO.

(It is suggested that size A4 paper be used for this test certificate)

FOR XYZ COMPANY