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उत्पाद मैनुअल
एन-ब्यूटाईल एक्राईलेट – विशिष्टि
14709: 2025 के अनुसार

PRODUCT MANUAL FOR
n-BUTYL ACRYLATE - SPECIFICATION
ACCORDING TO IS 14709: 2025

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 underScheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations,2018 for variousproducts. The document may also be used by prospective applicants desirous of obtaining BIS certification.

1.	**मानक संख्या** **IS No.**	:	IS 14709 : 2025
	शीर्षक **Title**	:	n-Butyl Acrylate - Specification
	संशोधनों की संख्या **No. of amendments**	:	0
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चा माल** Raw material	:	No specific requirement.
b)	**समूहीकरण दिशानिर्देश** **Grouping Guidelines**	:	NA
c)	**नमूने का परिमाण** **Sample Quantity**	:	1000 ml.
d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**		Name of the product: 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 see Annex –A
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	कृपया Annex-B देखें Please see Annex – B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**	:	All the tests mentioned in IS 14709 are possible to be carried out in a day.
6.	**लाइसेन्स का कायषक्षेत्र/Scope of the Licence**:		
	Licence is granted to use Standard Mark as per IS 14709 : 2025 with the following scope:		
	उत्पाद का नाम Name of the product	n-Butyl Acrylate	

BUREAU OF INDIAN STANDARDS
ManakBhawan, 9, Bahadur Shah
ZafarMarg, New Delhi – 110002

ANNEX – A
LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sr. No.	Tests used in with Clause Reference		Test Equipment
	Test	**Clause**	
1.	Assay	Cl 3, Table 1, Sl. No. (i)	Any suitable Gas liquid Chromatograph with flame ionization detector, as per A-2 of IS 14709, Standards for Calibration and identification.
2.	Acidity (as acrylic acid)	Cl 3, Table 1, Sl. No. (ii)	Weighing Balance, 100 ml measuring Cylinder, 250 ml Erlenmeyer flask, 10 ml Burette graduated in 0.05 ml, 50 ml pipette, 0.5 ml pipette, Refined ethyl or iso-propyl alcohol, Phenolphthalein Indicator, Sodium Hydroxide
3.	Colour, Pt-Co scale,	Cl 3, Table 1, Sl. No. (iii)	Colour Comparison Tubes - matched 100 ml, tall form Nessler tubes with 100 ml mark at 275 mm to 295 mm above bottom, Colour comparator, Spectrophotmeter with 10 mm cells, Cobalt Chloride Hexahydrate, Chloroplatinic acid or Potassium Chloroplatinate Hydrochloric acid, Nitric Acid Platinum-Cobalt Stock Solution Standard Platinum -Cobalt Scale Matching Solutions, Reagent Grade Water Volumetric Flasks Porcelain Dish Stoppered Glass bottles Micro/semi micro Burette Weighing Balance
4.	Water	Cl 3, Table 1, Sl. No. (iv)	**As per IS 2362** Karl Fischer Titrator Methanol, 2-Methoxyethanol, Iodine, Pyridine, Sample Solvent Sulphur dioxide, Karl Fischer Reagent, Sodium tartarate, Crystalline, Water-Methanol Standard Solution - 10 mg/ml Water-Methanol Solution – approximately 2 g/l,

			Aluminium Sodium Silicate/Activated Silica Gel, Silicone base grease, **As per IS 1448 (Part 182)** Molecular Sieve Pellets - type 4A, Xylene- reagent grade, Karl Fischer reagents, Sodium Dioctlysulfosuccinate – reagent grade, Dry xylene, Water conforming to grade 3 of ISO 3696, Methanol, Automatic coulometric Karl Fischer titrator Non-aerating mixer capable of meeting the homogenization requirements, Syringes, Hot air oven, Sealable bottles or desiccators Volumetric Flask, Cooling bath Hygrometer, Thermometer
5.	Inhibitors (as Butyl Etherhydroquinone)	Cl 3, Table 1, Sl. No. (v)	**As per Annex –A –** Any suitable Gas liquid Chromatograph with flame ionization detector, as per A-2 of IS 14709, Standards for Calibration and identification. Or **As per Annex – C** - Spectrophotometer, Weighing Balance (LC-0.1mg), Volumetric flasks -50 and 100 ml capacity, Measuring Pipettes-5 and 10 ml capacity, Acetic acid (glacial), Monomethyl Ether of Hydroquinone (MEHQ), Sodium Nitrite, Distilled water

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 differenttests 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: For the purpose of this scheme, a control-unit is defined as the entire quantity of n- Butyl Acrylate produced under similar condition of manufacturing in a day.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommendedlevels 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 requirementsof 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 housetesting 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 givenbelow. 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 perIS/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 facilitiesor get testing done from BIS recognized/empaneled laboratory or any other laboratory having validNABL accreditation as per IS/ISO/IEC 17025.

2.3 **Large Scale manufacturers shall maintain an in-house laboratory equipped at least withtest facilities for routine tests (indicated as "R" in Column 2 of Table 1)**, where different testsgiven 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 theprovisions 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 commoncluster 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 laboratoryor 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 marked on the container provided always that material so marked conform to requirements of the specification.

3.1 Packing and Marking shall be done as per Cl. 4 of the Indian Standard. In addition, the following shall be incorporated on each container:

3.1.1 BIS Licence No. (CM/L)
3.1.2 BIS website details i.e. ―For details of BIS certification please visit www.bis.gov.in '.

3.2 If material is supplied in tank cars, tank trucks, container ships etc. the Standard Mark as given in Schedule of the licence and Licence Number (i.e. CM/L .....) shall be incorporated on a test certificate to be provided along with each tank car/tank truck/container ship as per the format at Appendix-1 enclosed, provided always that the product thus marked conforms to all the requirement of the specification. Packing shall be done as per provisions of Indian Standard and the marking details as per Cl 4.2 of IS 14709: 2025 shall also be indicated on the test certificate.

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)

Sl No.	(1)				(2)	(3)		
	Test Details				Test equipment requirement R: required (or) S: Subcontracting permitted	Levels of Control		
	Clause	Requirement	Test method			No. of Sample	Frequency	Remarks
			Clause	Reference				
i)	Cl 3, Table 1 Sl. No. (i)	Assay	Annex A	IS 14709	R	One	Each Control Unit	
ii)	Cl 3, Table 1 Sl. No. (ii)	Acidity (as acrylic acid)	Annex B	IS 14709	R	One	Each Control Unit	
iii)	Cl 3, Table 1 Sl. No. (iii)	Colour, Pt-Co scale	IS 8768	IS 8768	R	One	Each Control Unit	
iv)	Cl 3, Table 1 Sl. No. (iv)	Water	IS 2362/ IS 1448(Part 182)	IS 2362 / IS 1448(Part 182)	R	One	Each Control Unit	
v)	Cl 3, Table 1 Sl. No. (v)	Inhibitors (as Monomethyl Ether hydroquinone)	Annex A/ Annex C	IS 14709	R	One	Each Control Unit	In case of dispute, Annex A shall be the referee method for determination of inhibitors.

Appendix-1

TEST CERTIFICATE

XYZ COMPANY

(REGISTERED OFFICE ADDRESS AND WORKS ADDRESS)

TEST CERTIFICATE FOR n-BUTYL ACRYLATE

TEST CERTIFICATE NO. _____ DATED _____

SUPPLIED TO M/s _____ (Name and Address of Consignee)

It is certified that the material described below fully conforms to IS 14709: 2025.

The properties of the product, as tested in accordance with the Scheme of Inspection and Testing contained in the BIS Certification Marks Licence No. CM/L _____ are as indicated below against each order no. etc.

(PLEASE REFER TO IS 14709: 2025 FOR DETAILS OF SPECIFICATION REQUIREMENTS)

TEST RESULTS

Order no and date	Name of the material	Requirement	Observed Value	Control Unit/Batch Number	Month and Year of manufacture	Quantity	Remarks
		Enclose sheet containing requirement wise observed values of all requirements of the Indian Standards					

The material supplied conforms to specified requirements of IS 14709 : 2025.

REMARKS:

Tank Car / Tank Truck / Container ship no.

(Signature)
For XYZ Company

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