



उत्पाद मैनुअल
विनाइल सल्फोन - विशिष्टि
आई एस 18340:2023 के अनुसार

PRODUCT MANUAL FOR
Vinyl Sulphone- Specification
as per IS 18340:2023

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

1.	मानक संख्या IS No.	:	IS 18340:2023
	शीर्षक Title	:	Vinyl Sulphone- Specification
	संशोधन संख्या No. of amendments	:	00
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	No requirement.
b)	समूहीकरण दिशा निर्देश Grouping Guidelines	:	Not Applicable
c)	नमूने का परिमाण Sample Size	:	500g approx.
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer Annex – A

4.	निरीक्षण व परीक्षण स्कीम Scheme of Inspection and Testing	:	Please refer Annex – B
5.	एक दिन में संभावित परीक्षण Possible tests in a day	:	All tests can be done in a day
7.	लाइसेंस का कार्यक्षेत्र /Scope of the Licence :		
	IS 18340:2023 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 18340:2023 with the following scope:		
	Name of the product	Vinyl Sulphone	

BUREAU OF INDIAN STANDARDS

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

Annexure A**LIST OF TEST EQUIPMENTS****(INDICATIVE LIST FOR GUIDANCE ONLY)**

Sl. No.	Tests Used in with Clause Reference	Test Equipment/Chemicals and Identification Numbers (Where applicable)
1.	Description(Cl. 3.1)	Visual
2.	Assay,% by Mass, ODB, Table 1, Cl. 3.2, Sl.No. i)	(By HPLC Method) 1. HPLC as per Clause B 2.1 and B 2.1.1 2. Analytical Balance 3. Ammonium Acetate HPLC Grade, Methanol HPLC Grade, Water HPLC Grade 4. Vinyl Sulphone of known purity (Ref. Std.), 5. Volumetric Flask Or (By Nitrite Value method) Hydrochloric Acid, Potassium Bromide, Std. Sodium Nitrite Sol., Potassium Starch Iodide Indicators, Ice and Ice box, Analytical Balance, Glass Beaker, Glass Rod, Soda Ash Sol. Pipettes, Volumetric Flask, Magnetic Stirrer, Distilled Water, pH paper or pH meter
	Hydrolysis Value,% by Mass, On 100% basis, Table 1, Cl. 3.2, Sl.No. ii)	1. Standard Sodium Hydroxide Solution, 2. Phenolphthalein Indicator 3. Ice and Ice box, 4. Analytical Balance 5. Beaker 6. Distilled Water 7. Sodium Hydroxide Solution, 0.1 N 8. Burette 9. Water Bath 10. Thermometer 11. Hot Plate 12 Glass Rod
	iii)Matter Insolubles in Sodium Carbonate Solution,% by Mass, Table 1, Cl. 3.2, Sl.No. iii)	1.Sodium Carbonate Solution (20 percent m/v) 2. Analytical Balance 3. Beaker, 4. Demineralized Water, 5. Glass Rod, 6. pH Meter/ paper 7. Whatman filter paper 8. Buchner's Funnel 9. Vacuum Pump 10. Dessicator 11. Wash bottle 12. Oven
	4-Chloroaniline Content ,% by Mass, On 100% basis, Table 1, Cl. 3.2, Sl.No. iv)	1. HPLC as per clause E-1.1 and E- 1.1.1 2. Analytical balance 3. Methanol HPLC Grade , Water HPLC Grade , Acetonitrile HPLC Grade 4. Sodium Carbonate 5. Trichloromethane/ Chloroform, 6. 4-Chloroaniline of known purity (ref. std.) 7. Volumetric Flask, Beaker, Separating Funnel,Pipette

ANNEXURE 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 different tests 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 : A single batch of vinyl sulphone produced from same raw materials and under similar conditions of production.-

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels 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 requirements of 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 house testing 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 given below. 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 per IS/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 facilities or get testing done from BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given 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 the provisions 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 common cluster 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 laboratory or 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 incorporated legibly and indelibly on each packaging provided always that the material so marked conforms to each requirement of the specification.

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

3.2 Additional Marking requirements: The material shall also be marked with the following additional requirement on each packaging:

- a) "For BIS certification details please visit www.bis.gov.in"
- b) Prominently and clearly marked with 'DANGER' in red letter

3.3 The bags in which the material is stored or transported may also be labelled with pictograms, signal word, hazard statement, and precautionary statement as given in Annex-F of the Indian Standard.

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)

(1)				(2)	(3)		(4)
Test Details					Levels of Control		Remarks
Clause	Requirements	Test Method		Test equipment requirement R: required (or) S: Sub-contracting permitted	No. of Samples	Frequency	
		Clause	Reference				
3.1	Description	3.1	IS 18340	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.		
3.2 Table 1	i)Assay	Annex-A or Annex-B	IS 18340	R	01	Each Control Unit	---
	ii)Hydrolysis Value	Annex-C	IS 18340	R	01	Each Control Unit	---
	iii)Matter Insoluble in Sodium Carbonate Solution	Annex-D	IS 18340	R	01	Each Control Unit	---
	iv)4-Choroaniline Content	Annex-E	IS 18340	R	01	Each Control Unit	---