उत्पाद मैन्युअल

18837:2024 के अनुसार

PRODUCT MANUAL
FOR
Solvent Cement for use with Chlorinated Polyvinyl Chloride Plastic Pipe and Fittings

ACCORDING to IS 18837:2024

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.**	:	18837:2024
	शीर्षक **Title**	:	Solvent Cement for use with Chlorinated Polyvinyl Chloride Plastic Pipe and Fittings
	संशोधनों की संख्या **No. of amendments**	:	Nil
2.	नमूना दिशानिर्देश **Sampling Guidelines**		
a)	कच्चा माल **Raw material**	:	*Base CPVC resin conforming to IS 17988 or rework material compatible with virgin material* Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be establishedduring Grant of Licence/Change in Scope of Licence/Factory Surveillance
b)	समूहीकरण दिशानिर्देश **Grouping Guidelines**	:	*Sample of each class i.e. regular bodied, medium bodied and heavy bodied cement shall be drawn to cover these classes of cement in scope of licence*

c)	**नमूने का परिमाण** **Sample Quantity**	:	*4 litre* 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 (incase of market surveillance, effort may be made to procure therequired quantity of product sample, as far as possible since raw material sample may not be available in market)
d)	**परीक्षण अनुरोध में घोषित किए जाने वाले पैरामीटर** **Parameters to be Declared in Test Request**		*Name of the Product:* *Type:*
3.	**परीक्षण उपकरणों की सूची** **List of Test Equipment**	:	Please refer to Annex-A
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	:	Please refer to Annex-B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**		
	All tests except Shelf Stability(Clause 5.5) and Hydrostatic sustained pressure strength (Clause 5.7) are possible in a day		
6.	**लाइसेंस का दायरा /Scope of the Licence:**		
	“Licence is granted to use Standard Mark as per IS 18837:2024 with the followingscope:		
	Name of the product		Solvent Cement for use with Chlorinated Polyvinyl Chloride Plastic Pipe and Fittings
	Type		Regular bodied and/or medium bodied and/or heavy bodied cement

ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests Used In WithClause Reference	Test Equipment/Chemical
1	Description, Clause 5.1.3, 5.1.4	Beaker, stirrer
2	Resin content, Clause 5.2	Ointment Tins all metal, Vacuum oven fitted with pressure gauge to maintain 15mm Hg minimum, Desiccator, glass rod, chemical –Tetra hydro furan, Analytical balance, Centrifuge.
3	Dissolution, Clause 5.3	CPVC Resin Powder/granular for Dissolution, Constant temperature bath.
4	Viscosity, Clause5.4	Brookfield Viscometer, Thermostatic liquid bath, beaker
5	Shelf Stability, Clause 5.5	Hot Air Oven, Container, Stirrer
6	Hydrostatic burst strength, Clause 5.6	2" CPVC pipes and coupling hydrostatic test m/c, suitable end closure, pressure gauge, stopwatch, Constant temperature bath
7	Hydrostatic sustained pressure strength, Clause 5.7	Constant Temperature Bath, Pressurizing System, Pressure Gauge, Timing Device, Specimen and Closures

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 theStandard 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 differenttests 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.

1.3 **RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT**:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is : the material manufactured in one continuous operation from the same consignment of raw materials.

1.3.2 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.

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.

2. ENSURING COMPLIANCE THROUGH TESTING- manufacturers shall ensure compliance of their products to all the requirementsof 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

2.1 **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.

3. PACKING AND MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on the container 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**: Additionally, the following shall also be marked on container:

a) "For BIS certification details please visit www.bis.gov.in"
b) Any other requirement not specified in the Indian Standard

4. HYGIENIC CONDITIONS (if applicable) – Not applicable

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

(Recommended Levels Of Control By BIS- For Guidance Only)

(1)				(2)		
Test Details				**Levels of Control**		
Cl.	Requirement	Test Methods Clause Reference		No. of Sample	Frequency	Remarks
5.1.1, 5.1.2	Resin material	5.1.1, 5.1.2	IS18837:2024	One	Each consignment	---
5.1.3, 5.1.4	Description	visual	IS18837:2024	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		
5.2	Resin content	Annex A Cl 5.2	-do-	One	Each control unit	---
5.3	Dissolution	Cl 5.3	-do-	One	Each control unit	---
5.4	Viscosity	Annex B Cl 5.4	-do-	One	Each control unit	---
5.5	Shelf Stability	Cl 5.5	-do-	One	Every 6 months	---
5.6	Hydrostatic burst strength	Annex C Cl 5.6	-do-	One	Each control unit	---
5.7	Hydrostatic Sustained pressure strength	Annex D Cl 5.7	-do-	One	Every 6 months	---