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उत्पाद मैन्युअल

एजाडिरेडटिन युक्त नीम आधारित पायसनीय सान्द्र

14300 : 2026 के अनुसार

PRODUCT MANUAL FOR
NEEM BASED EC CONTAINING AZADIRACHTIN
ACCORDING TO IS 14300 : 2026

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.**	:	IS 14300 : 2026
	शीर्षक **Title**	:	Neem Based EC Containing Azadirachtin- Specification
	संशोधनों की संख्या **No. of amendments**	:	0
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चा माल** **Raw material**	:	No specific requirement. 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**	:	Please refer Annex – A
c)	**नमूने का परिमाण** **Sample Quantity**	:	500 ml. 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**	:	• **Nominal Value** 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**	**:**	Please refer Annex – B
4.	**निरीक्षण और परीक्षण की स्कीम** **Scheme of Inspection and Testing**	**:**	Please refer Annex - C
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day**		
	i) Cold Test ii) Flash Point iii) Emulsion Stability iv) Azadirachtin Content v) Acidity/Alkalinity vi) Aflatoxin Content Note: This section is for the guidance of BIS Certification Officers/Technical Auditors of BIS Authorized Outside Surveillance Agencies (OSAs) during factory inspection to provide readyreference regarding the tests which can be witnessed during the inspection in the factory by the officer/auditor.		
6.	**लाइसेंस का दायरा /Scope of the Licence:**		
	Licence is granted to use Standard Mark as per IS 14300 : 2026 with the following scope		
	Name of the product	Neem Based EC Containing Azadirachtin	
	Nominal Value	Group-1/Group-2/Group-3	

ANNEX-A

GROUPING GUIDELINES

1) Based on the nominal value of Azadirachtin content, there are 3 groups defined in the Standard:

i. Group 1- upto 9%
ii. Group 2- Above 9% and below 50%
iii. Group 3- 50% and above

2) Considering the above, following grouping guidelines for GoL/CSoL have been developed:

i. One sample of highest nominal value shall be drawn from each group to cover all nominal values falling under the group in the scope of licence.

ii. Scope of licence shall be restricted based on the manufacturing and testing facilities available.

iii. During operation of licence, samples of each variety covered in the scope of licence, shall be tested in rotation, to the extent possible

ANNEXURE –B

LIST OF TEST EQUIPMENT

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Test used in with clause reference	Test Equipment/Chemical
1.	Cold test Clause 3.2.2	• Glass container/Beaker with cork or stopper fitted with thermometer. • Stirrer • Water bath • Ice- cold water.
2	Flash point Clause 3.2.3	• Cleaning solvent • Coolant • Lubricant • Verification Liquids • Ignitor and pilot light gas • Flash point apparatus/Abel flash point apparatus consisting of test cup, cover assembly, heating vessel, heating device, flash detector, Stirrer. • Thermometers 2 (one for the oil cup of range; -35°C to +70°C, and another for the water bath of the range; -30°C to +80°C), • Timing device • Barometer • External cooling bath • Test cup thermal insulating cap • Ethylene Glycol
3	Emulsion stability Clause 3.2.4	• Beaker • Mohr type pipette/Dropping funnel • Glass rod (Dia- 4 to 6 mm) • Graduated cylinder • Standard hard water
4	Active content Clause 3.3.1	• High Performance Liquid Chromatography unit equipped with ultraviolet (UV) detector and printer-plotter-cum-integrator. • Micro syringe 25 µl capacity • Volumetric Flasks 10ml, 50ml and 100ml • Pipettes-graduated, 2ml and 5ml. • Acetonitrile HPLC grade • Water HPLC grade • Methanol HPLC grade • Analytical balance

5	Acidity/Alkalinity Clause 3.3.2	• Methyl red indicator solution • Bromocresol purple indicator solution • Standard sodium hydroxide solution • weighing balance • Standard hydrochloric acid • Conical flask, Volumetric Flasks, burettes and Pipettes • Methyl alcohol • Sodium hydroxide • Hydrochloric acid • pH meter • Buchner funnel
6	Aflatoxin content Clause 3.3.3	• Chloroform • Methanol • Silica gel column • Thin layer Chromatography

ANNEX –C

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 the Standard 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 entire quantity of material of a particular Nominal Value processed and formulated in a mixer.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommendedlevels 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 requirements of 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 stenciled/printed on each container of Neem Based EC Containing Azadirachtin, provided always that the material in each container to which this mark is thus applied, conform to every 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 each container of Neem Based EC Containing Azadirachtin:

a) "For BIS certification details please visit www.bis.gov.in

4. 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 method with clause ref.	Test method ISS	No. of Sample	Frequency	Remarks
3.2.1	Description	3.2.1	IS 14300	One	Each control unit	
3.2.2	Cold Test	33	IS 6940	One	Each control unit	
3.2.3	Flash point	--	IS 1448 (Part 20)	One	Each control unit	
3.2.4	Emulsion stability	19	IS 6940	One	Each control unit	
3.3.1	Active Content	Annex A	IS 14300	One	Each control unit	
3.3.2	Acidity/ Alkalinity	21	IS 6940	One	Each control unit	
3.3.3	Aflatoxin Content	Annex B	IS 14299	One	Each control unit	