



उत्पाद मैनुअल
थीरम पाउडर फॉर ड्राइ सीड ट्रीटमेंट - विशिष्टि
IS 14186:2024 के अनुसार

PRODUCT MANUAL
FOR Diflubenzuron Wettable Powder (WP) – Specification
ACCORDING TO IS 14186:2024

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.	:	IS 14186:2024
	शीर्षक Title	:	Diflubenzuron Wettable Powder (WP) – Specification
	संशोधनों की संख्या No. of amendments	:	NIL
2.	नमूना दिशानिर्देश Sampling Guidelines		
a)	कच्चा माल Raw material	:	Diflubenzuron, technical employed in the formulation of this material shall conform to IS 14185. Conformity may be established through test report of BIS recognized/empanelled lab or NABL accredited lab or in-house testing. No testing is required if the material is ISI Marked. Note: This section indicates the requirements for raw material (if specified in the IS) for which compliance is to be established during Grant of Licence/Change in Scope of Licence/Factory Surveillance

b)	समूहीकरण दिशानिर्देश Grouping Guidelines	:	Not applicable since no varieties are specified in the standard
c)	नमूने का परिमाण Sample Quantity	:	500 gms 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)
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 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 14186:2024 with the following scope:		
	Name of the product		Diflubenzuron Wettable Powder (WP)

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN,9, BAHADUR SHAH ZAFAR MARG,
NEW DELHI-110002

ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests Used In With Clause Reference	Test Equipment/Chemical
1	Diflubenzuron content, Cl. 3.3, Table 1	HPLC Apparatus, Micro syringe – 25 µl capacity, Sintered Glass Crucible, Reference Standard Diflubenzuron of known purity, Dibutyl phthalate, Dioxane- HPLC grade, Methanol-HPLC grade, Water-Glass redistilled, Analytical Balance (0-200 gm, LC -0.01 mg), Steam bath, Beakers, Pipette, Volumetric flask.
2	Sieving (material passing through 44 micron IS sieve), Sieving (material passing through 44 micron IS sieve)	Beaker of 6.0 to 6.5 cm and 250 ml capacity, Pressure assembly, Rubber hose-of about 10 mm internal diameter, Widemouth bottle with cork or rubber stopper, 4 to 6 mm diameter glass rod, Gooch crucible, Beakers, Camel hair brush or a feather, Weighing Dish, Analytical Weighing Balance (LC- 0.001g), Hot Air Oven capable of maintaining 54+1 0C, LC 10C, tap water, 44 micron IS sieve
3	Suspensibility, Cl. 3.3, Table 1	Beaker, Pressure Assembly, Graduated cylinder, Glass Tube, Standard Hard Water, Glass Rod, Air conditioner, Stop watch, Petri dish, Hot Air oven (capable of operating at 900C), Dioxane, Analytical balance (0-200 gm, LC-0.01 mg).
4	Acidity (as H ₂ SO ₄) , Cl. 3.3, Table 1	Analytical Balance, Stop watch, Beaker - of 6.0 to 6.5 cm and 250 ml capacity, Standard hard water, Stop watch.
5	Wettability, Cl. 3.3, Table 1	Quantitative test: Analytical Balance (Least count 0.1g) Heating mental / hot plate Test tube, Conical flask, Litmus paper, Sodium hydroxide- 0.05 N, Hydrochloric Acid – 0.05 N Methyl red indicator solution, Bromocresol purple indicator. Electrometric procedure: Methyl alcohol-distilled, Sodium hydroxide- 0.05 N, Hydrochloric Acid – 0.05 N, Acetone, Buffer solution, pH meter, Analytical balance ((LC 0.1g), Stirring rod, Buchner funnel, filter flask/Conical flask.

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 as follows, as applicable:

a) Repacker: The entire quantity of material packed from a single batch received with Standard Mark.

b) Batch Process (BP): The entire quantity of the material finally blended in a blender at a time in one operation.

c) Continuous Process (CP): Every 100 containers of 50 kg each, of the material or part thereof, manufactured continuously, not exceeding a day's 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/empaneled 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 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:** The material shall also be marked with the following additional requirement on each container:

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

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)		
Test Details				Test equipment requirement R: required (or)S:Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Methods Clause Reference			No. of Sample	Frequency	Remarks
3.1.1	Constituents	3.1.1	IS 14186	R	Manufacturer shall ensure adequate inspection and in-process controls to ensure conformity to the requirements of the standard		
3.1.2	Raw material		IS 14185	S	One	Each consignment	Diflubenzuron, technical employed in the formulation of this material shall conform to IS 14185. Conformity may be established through test report of BIS recognized/empanelled lab or NABL accredited lab or in-house testing. No testing is required if the material is ISI Marked.
3.2	Description	3.2	IS 14186	R	Manufacturer shall ensure adequate inspection and in-process controls to ensure conformity to the requirements of the standard		
3.3, Table 1	Requirements						
i.	Diflubenzuron content,	Annex A	IS 14185	R	Five for CP One for BP Two for Repacker	Each Control Unit	
ii.	Sieving (material passing through 44 micron IS sieve)		IS 6940	R	Two for CP and Repacker One for BP	Each Control Unit	

iii.	Suspensibility		IS 6940	R	Five for CP One for BP Two for Repacker	Each Control Unit	
iv.	Acidity (as H ₂ SO ₄)	Annex A	IS 14186	R	Two for CP and Repacker One for BP	Each Control Unit	
v.	Wettability		IS 6940	R	One composite sample for CP* One for BP and Two for Repacker	Each Control Unit	*A composite sample shall be prepared by mixing together the samples drawn from the control unit.