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उत्पाद मैन्युअल

थायोफैनेट मिथाइल वेटेबल पाउडर्स - विशिष्टि

IS 14552:2024 के अनुसार

PRODUCT MANUAL
FOR Thiophanate methyl wettable powders - Specification
ACCORDING TO IS 14552:2024

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 14552:2024
	शीर्षक **Title**	:	Thiophanate methyl wettable powders - Specification
	संशोधनों की संख्या **No. of amendments**	:	NIL
2.	**नमूना दिशानिर्देश** **Sampling Guidelines**		
a)	**कच्चा माल** **Raw material**	:	Thiophanate methyl technical, employed in the formulation of this material shall conform to IS 14551. 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 (in case of market surveillance, effort may be made to procure the required 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 ready reference 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 14552:2024 with the following scope:		
	Name of the product	Thiophanate methyl wettable powders	

ANNEX – A

LIST OF TEST EQUIPMENTS

(INDICATIVE LIST, FOR GUIDANCE ONLY)

Sl. No.	Tests Used In WithClause Reference	Test Equipment/Chemical
1	Thiophanate methyl content, (Clause 3.3)	**I) UV SPECTROSCOPIC METHOD:** UV Spectrophotometer, Quartz cell-matched pair with path length of 1.000 cm, Volumetric Flask, Long Tipped Pipette, Nitrogen cylinder with suitable regulator and tube. Acetone- Spectroscopic grade, Ethyl Acetate - Spectroscopic grade, n- Haxane- Spectroscopic grade, Methanol - Spectroscopic grade, Silica Gel- olumn chromatography grade, 200 mesh particle size, Analytical balance (0-200 gm, LC-0.01 mg). **II) HPLC METHOD:** High Performance Liquid Chromatograph, Volumetric Flask, Pipettes, Acetonitril - HPLC grade. Methanol - HPLC grade, Water - HPLC grade, Thiophanate Methyl Standard of known purity, Interned Standard - Propyl-4-hydroxybenzoate, Analytical balance (0-200 gm, LC-0.01 mg)
2	Material passing through 75 micron IS sieve (Clause 3.3)	Beaker of 6·0 to 6.5 cm and 250 ml capacity, Pressure assembly, Rubber hose-of about 10 mm internal diameter, Wide mouth 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+10C, LC 10C, tap water, 75-micron IS sieve.
3	Suspensibility (Clause 3.3)	Beaker-100ml, Analytical balance (0-200 gm, LC-0.01 mg), Separating funnel, Ethyl acetate, pipette, Pressure Assembly Standard Hard water, Glass rod – 4-6 mm in diameter, Graduated cylinder with stopper, Water bath capable of operating at 30 + 10C, Vacuum pump, Pressure Assembly.
4	Acidity (as H2SO4) or Alkalinity (as NaOH) (Clause 3.3)	**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.

5	Wettability (Clause 3.3)	Analytical Balance, Stop watch, Beaker - of 6·0 to 6.5 cm and 250 ml capacity, Standard hard water, Stop watch

ANNEX C

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: The entire quantity of material finally blended in a blender at a time in one operation in case of batch process (BP) and every 100 containers of 50 kg each of the material or part thereof, manufactured continuously not exceeding a day's production in case of a continuous process (CP).

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 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 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**	**Levels of Control**		
Cl.	**Requirement**	**Test MethodsClause Reference**		**R: required (or)S: Sub-contracting permitted**	**No. of Sample**	**Frequency**	**Remarks**
3.1.1	Constituents	3.1.1	IS 14552	R	Manufacturer shall ensure adequate inspection and in-process controls to ensure conformity to the requirements of the standard		
3.1.2	Raw Material	3.1.2	IS 14552	S	One	Each consignment	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 14552	R	Manufacturer shall ensure adequate inspection and in-process controls to ensure conformity to the requirements of the standard		
3.3	Requirements for Thiophanate Methyl, WP						
i.	Thiophanate methyl content	Annex A	IS 14551	R	Five for CP One for BP	Each control unit	CP= Continuous process BP = Batch Process
ii.	Material passing through 75 micron IS sieve		IS 6940	R	Two for CP One for BP	Five for CP One for BP	CP= Continuous process BP = Batch Process
iii.	Suspensibility	Annex A	IS 14552	R	Five for CP One for BP	Five for CP One for BP	CP= Continuous process BP = Batch Process
iv.	Acidity (as H2SO4) or Alkalinity (as NaOH)		IS 6940	R	One composite sample* for CP One for BP	Five for CP One for BP	CP= Continuous process BP = Batch Process *Composite sample shall be prepared by mixing together the samples drawn from the control unit.
v.	Wettability		IS 6940	R	Two for CP One for BP	Five for CP	CP= Continuous process BP = Batch Process

						One for BP	