



**PRODUCT MANUAL
FOR
PESTICIDES - DIMETHYL AMINE SL SALTS OF 2, 4-D
ACCORDING TO IS 1827 : 1989**

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence 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 licence/certificate.

1.	Product	:	IS 1827 : 1989
	Title	:	Pesticides-Dimethyl Amine SL Salts of 2, 4-D
	No. of Amendments	:	01
2.	Sampling Guidelines:		
a)	Raw material	:	2, 4-D, technical employed in the manufacture of Pesticides-Dimethyl Amine SL Salts of 2, 4-D shall conform to IS 4321.
b)	Grouping guidelines	:	NA (No varieties for the product mentioned in IS)
c)	Sample Size	:	500 grams
3.	List of Test Equipment	:	Please refer ANNEX – A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – B
5.	Possible tests in a day :		
	i. Description ii. Identity test iii. Acid content iv. Melting point of the extracted acid v. Alkalinity		
6.	Scope of the Licence :		
	“Licence is granted to use Standard Mark as per IS 1827 : 1989 with the following scope:		
	Name of the product	Pesticides - Dimethyl Amine SL Salts of 2, 4-D	

ANNEX - A
TO PRODUCT MANUAL
FOR PESTICIDES - DIMETHYL AMINE SL SALTS OF 2, 4-D
ACCORDING TO IS 1827 : 1989

LIST OF TEST EQUIPMENT

Major test equipment required to test as per the Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Identity Test (Cl. No. 3.3), Annex A, IS 1827	Sodium Nitroprusside 1%, Acetaldehyde 10 % Sodium Carbonate 2 % Pipette, Test Tube
2.	Acid Content (Cl. No. 3.4), Annex B, IS 1827	Dilute Hydrochloric Acid 1:1(v/v) Diethyl Ether Absolute Alcohol (Neutral)/Methyl Alcohol (Neutral) Bromothymol Blue Indicator 0.04 % (w/v) in alcohol Methyl Orange Indicator, Sodium Hydroxide Distilled Water, Analytical balance LC 0.000g Separating Funnel, Erlenmeyer Flask-250 ml.
3.	Melting Point of Extracted Acid (Cl. No. 3.4), Annex C, IS 1827	Thermometer-A long-stem and short-bulb thermometer with a range of 0 to 200°C or 100 to 200°C and with subdivisions of 0.5°C. Bath and Heating Assembly- 250-ml Kjeldahl flask, Liquid Paraffin Capillary Tubes, Vacuum Desiccator, Silica Gel, Gas Burner, Laminar Air Flow Chamber/Inoculation Chamber.
4.	Alkalinity (Cl. No. 3.4), 13.5 of IS 6940	Methyl Red Indicator - Aqueous one percent (m/v). Bromocresol Purple Indicator- One percent (mlv) in ethyl Alcohol, Hydrochloric Acid- 0.05 N Sodium Hydroxide- 0.05 N Analytical Balance, Erlenmeyer Flask, Test Tube, Litmus Paper <u>Electrometric Procedure</u> Buffer solution, Acetone- distilled, Sodium Hydroxide- 0.05 N, Hydrochloric acid-0.05 N Distilled Water, Hydrochloric Acid, Weighing Balance pH Meter, Erlenmeyer Flask, Buchner Funnel

The above list is indicative only and may not be treated as exhaustive.

ANNEX B

**SCHEME OF INSPECTION AND TESTING
FOR PESTICIDES - DIMETHYL AMINE SL SALTS OF 2, 4-D
ACCORDING TO IS 1827 : 1989**

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare a calibration plan for the test equipments.

2. TEST RECORDS – The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING – The Standard Mark, as given in the Schedule of the licence, shall be stenciled/printed on each container of Dimethyl Amine SL Salts of 2, 4-D or printed on the label applied to it, as the case may be, 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 provision of the Indian Standard. In addition, the following details shall be mentioned on each container legibly and indelibly:

a) BIS Licence No. CM/L_____.

b) BIS website details i.e –“For details of BIS certification please visit www.bis.gov.in”.

4. CONTROL UNIT – For the purpose of this scheme, the entire quantity of material processed in a mixer in one operation shall constitute a control unit.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. RAW MATERIAL – 2, 4-D technical used in the manufacture of Dimethyl Amine SL Salts of 2, 4-D shall conform to IS 4321. Each consignment of 2, 4-D technical shall either be covered by a test report from the manufacturer/a BIS recognised laboratory or tested in house for its conformity to IS 4321 and records maintained.

7. REJECTIONS – 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
LEVELS OF CONTROL**

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method Cl. Ref.	Test Method IS		No. of Sample	Frequency	Remarks
3.1	Constituents	3.1	IS 4321	S	Each Consignment		No further testing is required, if accompanied with the test certificate or ISI Marked.
3.2	Description	3.2	IS 1827	R	One	Each Control Unit	In case any failure is observed, the future production shall not be marked until the results of further tests indicate conformity with the requirements of the specification.
3.3	Identity Test	Annex A	IS 1827	R	-do-	-do-	
3.4, Table 1	Acid Content	Annex B	IS 1827	R	-do-	-do-	
3.4, Table 1	Melting Point of Extracted Acid	Annex C	IS 1827	R	-do-	-do-	
3.4, Table 1	Alkalinity	13.5	IS 6940	R	-do-	-do-	

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empanelled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval by BO Head.