



**PRODUCT MANUAL
FOR WETTABLE SULPHUR POWDER
ACCORDING TO IS 3383 : 1982**

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 3383 : 1982
	Title	:	Wettable Sulphur Powder
	No. of Amendments	:	02
2.	Sampling Guidelines:		
a)	Raw material	:	No specific requirement
b)	Grouping guidelines	:	NA (No variety for the product mentioned in IS)
c)	Sample Size	:	500 gm
3.	List of Test Equipment	:	Please refer ANNEX –A
4.	Scheme of Inspection and Testing	:	Please refer ANNEX –B (Both for Manufacturers and Repackers)
5.	Possible tests in a day:		
	<ul style="list-style-type: none"> i. Description ii. Sulphur content iii. Material passing through 45 micron IS sieve iv. Suspensibility v. Wettability vi. Arsenic 		
6.	Scope of the Licence:		
	“Licence is granted to use Standard Mark as per IS 3383 : 1982 with the following scope (Manufacturers or Repackers as applicable):		
	Name of the product	Wettable Sulphur Powder (80%) / Repacked Wettable Sulphur Powder.	

ANNEX – A
TO PRODUCT MANUAL
FOR WETTABLE SULPHUR POWDER
ACCORDING TO IS 3383 : 1982

LIST OF TEST EQUIPMENT

Major test equipment required to test as per the Indian Standard

Sl. No.	Test Equipment	Tests used in with Clause Reference
1	Crystalline Sodium sulphite, Liquid Paraffin Formaldehyde-40 % (v/v), Acetic Acid-20 % (v/v), Standard Iodine Solution- 0.1 N, Starch Indicator-0.5 %, Carbon Tetrachloride Weighing balance 0-200g, LC 0.01 mg, Erlenmeyer Flask, water Assembly attached with Condenser, Heating mantel /hot plate, Titration assembly.	Sulphur content Cl 2.2.1 (Appendix A of IS 3383)
2	Beaker of 6.0 to 6.5 cm and 250 ml capacity, Pressure assembly, Rubber hose, wide mouth bottle with cork or rubber stopper, 4 to 6 mm diameter glass rod, Gooch crucible, Beakers, weighing balance (0-200 gm, LC-0.01 mg), Oven, Brush, Weighing dish, 45 micron IS sieve.	Material passing through 45 micron IS sieve Cl 2.2, Table 1 (cl 11.1 of IS 6940)
3	Beaker, Pressure assembly, Graduated cylinder of 250 ml capacity with a ground glass stopper, Glass tube about 40 cm long, standard hard water, glass rod (4-6 mm dia), weighing balance (0-200 gm, LC-0.01 mg), Temperature controlled Water bath, Vacuum pump, Thermometer, Conical flask	Suspensibility Cl 2.2, Table 1 (cl 11.2 of IS 6940)
4	Standard hard water, stop watch, Distilled Water, Volumetric flasks, Weighing Balance (0-200 gm, LC-0.01 mg), Beaker.	Wettability Cl 2.2, Table 1 (cl 11.4 of IS 6940)
5	Weighing balance (0-200gm, LC-0.01 mg), Kjeldahl flask-500 ml, Bromine, Carbon Tetrachloride, Conc. Nitric acid, Ice Bath/Cold water, Steam bath, Hot plate, Distilled Water Apparatus for test of Arsenic as per Fig 1 of IS 2088, Lead Acetate solution-10 % (m/v), Lead Acetate paper strips, Absorbent cotton wool impregnated with lead acetate, Mercuric bromide solution, Sensitized Mercuric Bromide paper strips, Dilute sulphuric acid-5 N, Conc. Hydrochloric acid, Potassium Iodide solution-15 % (m/v), Stannous chloride solution, Zinc -granules of size 0.05 to 1.0 mm, Standard arsenic stock solution, Silver Diethyl dithiocarbamate solution Standard Glass ware.	Arsenic Cl 2.2, Table 1 (Appendix B of IS 3383)

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

ANNEX - B

SCHEME OF INSPECTION AND TESTING FOR WETTABLE SULPHUR POWDER ACCORDING TO IS 3383 : 1982

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 printed on each container of Wettable Sulphur Powder or printed on the labels applied to it as the case may be, provided always that the material in each container to which this mark is thus applied conforms to every requirement of the specification.

3.1 Marking- The material shall be marked as per the provisions of clause 3 of IS 3383. In addition, the following details shall also be marked 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”.
- c) In case of repackers, Name and BIS licence number of original manufacturers of Wettable Sulphur Powder shall also be mentioned.

3.1.2 When bags (above 10 kg) are used for packing the materials, the pictorial marking for “USE NO HOOKS” , as contained in IS1260 (Part I) : 1979 pictorial markings for handling and labelling of goods, Part 2 General Goods (Second Revision) shall be marked on each bag.

3.2 PACKING - The material shall be packed as per clause 3 of IS 3383.

3.2.1 Repacking of material shall be as per the requirements given in IS 8190 (Part 1), Requirement for packing of pesticides Part 1 Solid Pesticides. The repacker shall maintain details of the repacked material, in format given in Table 2.

4. CONTROL UNIT – For the purpose of this scheme, for manufacturers, the entire quantity of material finally blended in a blended at a time in one operation in case of batch process (BP) and every 100 container of 50 kg each of the material or part thereof manufactured, continuously, not exceeding a day’s production in case of continuous process (CP) shall constitute Control Unit.

For repackers, the material repacked from a single control unit received with Standard Mark, for each consignment received, shall constitute one 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.REJECTION – 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: Subcontracting permitted	LEVELS OF CONTROL		
CI	Requirement	Test Method Cl. Ref.	Test Method IS		No. of samples	Frequency	Remarks
2.1	Description	2.1	IS 3383	R	One	Each control unit	
2.2.1	Sulphur content	Appendix A	-do-	R	-do-	-do-	
2.2, Table 1	Material passing through 45 micron IS sieve	11.1	IS 6940	R	-do-	-do-	
-do-	Suspensibility	11.2	-do-	R	-do-	-do-	
-do-	Wettability	11.4	-do-	R	-do-	-do-	
-do-	Arsenic (as As)	Appendix B	IS 3383	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.

TABLE 2

**RECORD FOR REPACKED WETTABLE SULPHUR POWDER
ACCORDING TO IS 3383 : 1982**

Name of the manufacturer	Particulars of test reports received with C.U	Date of manufacture	Quantity received	Date of receipt	Date of repacking	Batch no.	Details of repacking		Total quantity	Details of dispatch
							Size	No.		
1	2	3	4	5	6	7	8	9	10	11