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**IS 10950 : 2024**

***भारतीय मानक***

***Indian Standard***

***फेन्थोएट डस्टिंग पाउडर (डी पी) — विशिष्टि***

(*पहला पुनरीक्षण*)

**PHENTHOATE DUSTING POWDER (DP) — SPECIFICATION**

(*First Revision*)

ICS No. 65.100.10

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**B U R E A U O F I N D I A N S T A N D A R D S**

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**November 2024** **Price Group**

Pesticides Sectional Committee, FAD 01

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Pesticides Sectional Committee had been approved by the Food and Agriculture Division Council.

Phenthoate dusting powder (DP) is widely used in the control of agricultural pests. It is generally manufactured to contain 2 percent (*m*/*m*) of phenthoate.

This standard was published in 1984. In this revision, the standard has been brought out in the latest style and format of the Indian Standards, and references to Indian Standards wherever applicable have been updated. It also incorporates one amendment issued to the previous version of this standards.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022. ‘Rules for rounding off numerical values (*second revision*)’ This number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

**1 SCOPE**

This standard prescribes the requirements and the methods of sampling and test for phenthoate dusting powder (DP).

**2 REFERENCES**

The following Indian Standards contain provisions which through reference in this text, constitute provision of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

|  |  |
| --- | --- |
| *IS No.* | *Title* |
| IS 460 (Part 1) : 2020 | Test sieves — Specification Part 1 Wire cloth test (*fourth revision*) |
| IS 1070 : 2023 | Reagent grade water — Specification (*fourth revision*) |
| IS 6940 : 1982 | Methods of test for pesticides and their formulations (*first revision*) |
| IS 8069 : 2023 | Textiles – High density polyethylene (HDPE) polypropylene (PP) woven sacks for packing pesticides — Specification (*third revision*) |
| IS 8190 (Part 1) : 1988 | Requirements for packing of pesticides: Part 1 Solid pesticides (*second revision*) |
| IS 8293 : 202X | Phenthoate, technical — Specification (*first revision*) [*Under Preparation Doc: FAD 01(25621)F*] |
| IS 10627 : 1983 | Methods for sampling of pesticidal formulations |

**3 REQUIREMENTS**

**3.1 Description**

The material shall be in the form of homogeneous powder. It shall be free-flowing and devoid of lumps. Phenthoate, technical used in its manufacture shall have been uniformly mixed in suitable fillers such as talc or pyrophyllite. The material when dusted from a hand rotary duster, shall issue freely without clogging or bridging. Phenthoate, technical employed in the manufacture of dusting powder formulations shall conform to IS 8293.

**3.2** The material shall also comply with the requirements given in Table 1.

**Table 1 Requirements of Phenthoate Dusting Powder (DP)**

(*Clause* 3.2)

|  |  |  |  |
| --- | --- | --- | --- |
| **Sl. No.** | **Characteristic** | **Requirements** | **Method of Test, Ref to** |
| (1) | (2) | (3) | (4) |
| i) | Phenthoate content, percent by mass, *Max* | Nominal value as  declared on the container  (*see* **3.3**) | Annex A of IS 8293 |
| ii) | Sieving requirement, material passing through 75 micron IS Sieve [*see* IS 460 (Part 1)], percent by mass, *Max* | 90 | IS 6940 |
| iii) | Bulk density after compacting | Not to exceed the value after compacting by more than 60 percent. | IS 6940 |
| iv) | Acidity (as H2SO4), percent by mass, *Max*  or  Alkalinity (as NaOH), percent by mass, *Max* | 0.25  0.05 | IS 6940  IS 6940 |

**3.3 Phenthoate Content**

When determined by the method prescribed in Annex A of IS 8293, the observed phenthoate content, percent (*m*/*m*), of any of the samples shall not differ from the nominal value by more than the percent tolerance applied to the declared nominal value as given below:

|  |  |  |
| --- | --- | --- |
| *Nominal Value, percent* | *Tolerance limit, percent* |  |
| Up to 9 | +10  ̶ 5 |  |
| Above 9 and below 50 | ±5 | of the nominal value |
| 50 and above | +5  ̶ 3 |  |

The actual value of phenthoate content shall be calculated to two decimal places and then rounded off to one decimal place before applying the tolerance.

**4 PACKING**

The material shall be packed in clean and dry containers made of mild steel or tinplate or fibre-board or double hessian jute bags or DW tarpaulin laminated jute bags or HDPE woven sacks [*see* IS 8069]. The containers shall also comply with general requirements given in IS 8190 (Part 1).

**5 MARKING**

**5.1** The containers shall be securely closed and shall bear legibly and indelibly the following information:

1. Name of the material;
2. Name and address of the manufacturer;
3. Batch number;
4. Date of manufacture;
5. Date of expiry;
6. Net quantity;
7. Nominal phenthoate content, percent (*m*/*m*);
8. Cautionary notice as worded in the *Insecticides Act*, 1968, and Rules framed thereunder; and
9. Any other information required under the *Legal Metrology* (*Packaged Commodities*) *Rules*, 2011.

**5.2 BIS Certification Marking**

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

**6 SAMPLING**

When freshly manufactured material in bulk quantity is offered for inspection, representative samples of the material shall be drawn and tested as prescribed in IS 10627 within 90 days of its manufacture. When the material is offered for inspection after 90 days of its manufacture, sampling shall be done as prescribed in IS 10627. However, the criteria for conformity of the material when tested, shall be the limits of tolerances, as applicable over the declared nominal value and given under **3.3**.

**7 TESTS**

Tests shall be carried out by appropriate methods as referred in col (4) of Table 1.

**8 QUALITY OF REAGENTS**

Unless specified otherwise, pure chemicals and distilled water (*see* IS 1070) shall be employed in tests.

NOTE – ‘Pure chemicals’ shall mean chemicals that do not contain impurities which affect the results of analysis.