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*भारतीय मानक मसौदा*

**एल्युमिनियम फॉस्फाइड पाउडर फॉर्मूलेशन — विशिष्टि**

*(आइ एस 15219 का पहला पुनरीक्षण)*

*Draft Indian Standard*

**ALUMINIUM PHOSPHIDE POWDER FORMULATION —  
SPECIFICATION**

*(First Revision of IS 15219)*

**ICS No. 65.100.99**

Pesticides Sectional Committee, FAD 01

**Last Date of Comments: 4 July 2024**

**FOREWORD**

*(Formal clauses will be added later)*

Aluminium phosphide powder formulation is used as a fumigant. It is generally manufactured to contain 56 percent by mass of aluminium phosphate.

This standard was published in 2002. 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.

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 methods of sampling and test for aluminium phosphide powder formulation in the form of powder.

## 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:

<i>IS No.</i>	<i>Title</i>
IS 1070 : 2023	Reagent grade water — Specification ( <i>fourth revision</i> )
IS 6438 : 202X	Specification for aluminium phosphide formulations ( <i>second revision</i> ) [ <i>Under preparation Doc: FAD 01(25478)WC</i> ]
IS 8190 (Part 4) : 1988	Requirements for packing of pesticides: Part 4 Fumigants ( <i>first revision</i> )

## 3 REQUIREMENTS

### 3.1 Constituents

3.1.1 The material shall essentially consist of:

- a) Aluminium phosphide as the only active ingredient;
- b) A chemical fire retardant; and
- c) A suitable binding material.

3.1.2 If required by the purchaser, the powder may also contain chemicals emanating a separate innocuous warning gas, such as, ammonia.

### 3.2 Physical

#### 3.2.1 Description

The material shall be in the form of powder greyish in colour. The material shall show no evidence of spontaneous combustion when exposed to air.

3.3 The material shall also comply with the requirements given in 3.3.1.

#### 3.3.1 Aluminium Phosphide Content

When determined by the method prescribed in Annex A of IS 6438, aluminium phosphide content shall be not less than 56 percent by mass.

## 4 PACKING

4.1 Aluminium phosphide powder is packed in gas permeable bags and are further packed in trilaminate pouch/metallic tin container.

4.2 The material shall be packed according to the requirements given in IS 8190 (Part 4).

## 5 MARKING

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

- a) Name of the material;
- b) Name and address of the manufacturer;
- c) Batch number;
- d) Date of manufacture;
- e) Date of expiry;
- f) Net quantity;
- g) Nominal aluminium phosphide content, percent (*m/m*);
- h) Cautionary notice as worded in the *Insecticides Act*, 1968, and Rules framed thereunder; and
- j) 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

Representative samples of the material shall be drawn as prescribed in Annex C of IS 6438.

## 7 TESTS

Tests shall be carried out by the appropriate methods referred to in 3.3.1.

## 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.