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भारतीय मानक मसौदा

ट्रिपल सुपरफास्फेट, उर्वरक ग्रेड - विशिष्टि

(आइ एस 1013 का दूसरा पुनरीक्षण)

Draft Indian Standard

TRIPLE SUPERPHOSPHATE, FERTILIZER GRADE – SPECIFICATION

(Second Revision of IS 1013)

ICS No. 65.080

Soil Quality and Fertilizers Sectional
Committee, FAD 07

Last Date of Comments: **9 August 2024**

FOREWORD

(Formal clauses would be added later)

This standard was first published in 1956. In the first revision issued in 1972, the minimum water-soluble phosphates (as P₂O₅) content was raised from 40.0 to 42.5 percent and another requirement relating to total P₂O₅ content was added.

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

In the preparation of this standard, due consideration has been given to the *Fertilizer Control Order*, 1985. However, this standard is subject to 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*)'. The 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 triple superphosphate for use as a fertilizer.

2 REFERENCES

The standards listed below contain provisions which through reference in this text, constitute provisions 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 listed below:

<i>IS No.</i>	<i>Title</i>
IS 1070 : 2023	Reagent grade water – Specification (<i>fourth revision</i>)
IS 6092 (Part 1) : 1985	Methods of sampling and test for fertilizers: Part 1 Sampling (<i>first revision</i>)
IS 6092 (Part 3/Sec 2) : 2004	Methods of sampling and test for fertilizers: Part 3 Determination of phosphorus: Sec 2 Test methods not covered under dual number standards (<i>second revision</i>)
IS 6092 (Part 6) : 1985	Methods of sampling and test for fertilizers: Part 6 Determination of moisture and impurities (<i>first revision</i>)

3 REQUIREMENTS

3.1 Description

The material shall be free from excessive lumps and shall not form hard cake on storage.

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

Table 1 Requirements for Triple Superphosphate, Fertilizer Grade
(*Clause 3.2*)

SI No.	Characteristic	Requirement	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Moisture, percent by mass, <i>Max</i>	12.0	IS 6092 (Part 6)
ii)	Free phosphoric acid (as P ₂ O ₅), percent by mass. <i>Max</i>	3.0	IS 6092 (Part 3/Sec 2)
iii)	Water-soluble phosphates (as P ₂ O ₅), percent by mass, <i>Min</i>	42.5	IS 6092 (Part 3/Sec 2)
iv)	Total phosphates (as P ₂ O ₅), percent by mass, <i>Min</i>	46.0	IS 6092 (Part 3/Sec 2)

4 PACKING

The material shall be packed in jute bags lined with polyethylene or in such other containers as agreed to between the purchaser and the supplier.

5 MARKING

5.1 Each bag shall bear legibly and indelibly following information:

- a) Name and type of the fertilizer;
- b) Name of the manufacturer and recognized trade mark and or brand name, if any;
- c) Gross and net quantity in kg.;
- d) Month and year of manufacture;
- e) The percentage of total and water-soluble phosphates (as P₂O₅) contents; and
- f) Any other requirements as specified under the *Fertilizer Control Order, 1985* and 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 test samples of the material shall be prepared as prescribed in IS 6092 (Part 1).

7 TESTS

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

7.2 Quality of Reagents

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

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