

**Magnesium sulphate fertilizer—
Specification**

PUBLIC REVIEW DRAFT

TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Kenya Agricultural and livestock Research Organization (KALRO)
Government chemist
Mea Ltd
Amiran (K) Ltd
Chemagro Ltd.
Yara East Africa
Kenya Tea Development Agency.
Kenya Plant Health Inspectorate Services (KEPHIS)
Ministry of Agriculture, livestock and fisheries
Osho Chemicals Ltd
Elgon chemicals Ltd
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University of Nairobi-Department of plant science and crop protection
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National Potato Council of Kenya
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REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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**Magnesium
Specification**

Sulphate

fertilizer

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Foreword

Foreword

This Kenya standard has been prepared by the Technical Committee on Fertilizers and soil conditioners under the guidance of the standards project committee and it is in accordance with the procedures of the Kenya bureau of standards.

During the revision of the standard the minimum nutrient content for Sulfate has been reviewed. Due to the nature of the product, which is hygroscopic, the moisture requirement has been removed.

During the review of the standard reference has been made to the following document

Indian fertilizer specifications- 2018

Magnesium Sulphate fertilizer — Specification

1.0 Scope

This Kenya Standard specifies the requirements, methods of sampling and tests for magnesium sulphate fertilizer.

2.0. Definitions and terms

The terms and abbreviations used in this standard are in accordance with the explanations contained in this document: ISO 8157:2015; fertilizers and soil conditioners: vocabulary

3.0 Requirements

3.1 Description

The material shall consist essentially of magnesium sulphate, and shall be in the form of free flowing crystals, powder or granules. It shall be free from visible foreign matter.

3.2 Physical

The particle size shall be such that not less than 90 % by mass shall be in the particle size range of 1 mm to 4 mm.

3.3 Chemical

The material shall comply with the requirements set out in table 1 when tested in accordance with the methods specified in the last column of the table.

SL.NO	Characteristic	requirement	Test method
i)	Water soluble magnesium content(as mgo)% by weight ,min	16.0	AOAC
ii)	Sulphate content as SO ₄ (% by weight) min	30.	AOAC

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2.6 Heavy metal contaminants

The heavy metal contaminants, if present, shall not exceed the limits stipulated in Table 2.

Table 2 — Heavy metal contaminants limits

SL NO	Parameter	Limits in ppm	Test method
i)	Arsenic, As, max.	20.0	AOAC
ii)	Cadmium, Cd, max.	7.0	AOAC
iii)	Mercury, Hg, max.	0.1	AOAC
iv)	Selenium, Se, max.	1.0	AOAC
v)	Lead, Pb, max.	30.0	AOAC

3 Packaging and marking /labelling

3.1 Packaging

3.1.1 The fertilizer shall be packaged in materials that ensures the product integrity and quality against physical damage, chemical and moisture contamination.

3.1'2. the fill of the package shall comply with the weight and measures act CAP 513 of the laws of Kenya

3.1.3 The disposal of used package and condemned fertilizer shall comply with EMCA 1999 no.8 of the disposal of solids and liquid wastes

3.2 Marking/ labelling

The following information shall be clearly and indelibly marked on each package or container.

- i. Name, address and physical location of manufacturer/packer/importer;
- ii. name of the fertilizer, i.e. "Magnesium sulphate fertilizer '
- iii. Guaranteed percentage by mass of the water soluble magnesium and sulphur content
- iv. date of manufacture,
- v. expiry date
- vi. batch/lot number
- Vii the net weight of the fertilizer in the package; in metric units
- Viii Storage and Handling instructions
- ix Instructions for use
- x disposal instructions
- xi. Country of origin;

4 Certificate of analysis

Each consignment shall be accompanied by a certificate of analysis.

4 Sampling

Sampling shall be carried as outlined in the ISO standards listed below

ISO 8633-Solid fertilizers -- Simple sampling method for small lots ISO 8634- Solid fertilizers -
- Sampling plan for the evaluation of a large delivery

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