

KENYA STANDARD KS 2426:2018

**Monopotassium phosphate (technical
grade) fertilizer — Specification**

DRAFT STANDARD AUGUST 2018

SECOND EDITION

KEBS 2018

TECHNICAL COMMITTEE REPRESENTATION

The following organizations were represented on the Technical Committee:

Government Chemist
Mea Ltd.
Chemagro Ltd
Kenya Plant Health Inspectorate Services (KEPHIS)
Kenya Agricultural and livestock research organization
Yara East Africa Ltd
Kenya Tea Development Agency
University of Nairobi
Ministry of Agriculture, Livestock and fisheries
Amiran (K) Ltd
Toyota Tshusho Fertilizers
Elgon chemicals
Osho chemicals
OCP Kenya Ltd.
Kel Chemicals
Kenya Bureau of Standards — Secretariat

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.

© Kenya Bureau of standards, 2018

Copyright: Users are reminded that by virtue of Section 6 of the Copyright Act, Cap. 130 of the Laws of Kenya, copyright subsists in all Kenya Standards and except as provided under Section 7 of this Act, no Kenya Standard may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from the Managing Director.

PUBLIC REVIEW DRAFT

KENYA STANDARD

KS 2426:2018

**Monopotassium phosphate Fertilizer,
technical grade — Specification**

PUBLIC REVIEW DRAFT

KENYA BUREAU OF STANDARDS (KEBS)

Head Office: P.O. Box 54974, Nairobi-00200, Tel.: (+254 020) 605490, 602350, Fax: (+254 020) 604031
E-Mail: info@kebs.org, Web:<http://www.kebs.org>

Coast Region

P.O. Box 99376, Mombasa-80100
Tel.: (+254 041) 229563, 230939/40

Lake Region

P.O. Box 2949, Kisumu-40100
Tel.: (+254 057) 23549, 22396

Rift Valley Region

P.O. Box 2138, Nakuru-20100
Tel.: (+254 051) 210553, 210555

Foreword

This Kenya standard has been prepared by the technical committee on fertilizers and soil conditioners under the guidance of the standards projects committee in accordance with the procedures of the Kenya Bureau of standards.

The rapid expansion of horticulture and irrigated farming has resulted in development of new technologies that aim at maximising nutrient use efficiency and offer opportunities for quick responses to plants nutrients needs. This has led to a need to develop special fertilizers that can be applied using these new technologies.

Like other fertilizer products, environmental aspects related to fertilizer raw materials have been taken care of, thus limits for heavy metals have been specified. Recent Association of official Analytical chemists (AOAC) methods of analysis have been adopted.

During the preparation of this standard, reference was made to the following document:

1. 2012, FAO mineral fertilizer specifications,
2. EU Cadmium limits, 2018

KENYA STANDARD

Monopotassium phosphate Fertilizer — Specification

1 Scope

This Kenya Standard specifies requirements and methods of test for Monopotassium phosphate Fertilizer, technical grade

2 Requirements

2.1 Description

The fertilizer shall be free flowing, in form of granules, pellets, crystals or prills, free from any foreign matter and shall not cake on storage

2.2. Physical

The fertilizer product shall be fully soluble in water

2.3 Chemical

The fertilizer shall conform to the requirements given in Table 1

Table 1 — Requirements for mono potassium phosphate fertilizer

SL NO	Characteristic	Requirement/limit	Test method
1	Available phosphate content, as P ₂ O ₅ ,% w/w, Min	51.5	AOAC
2	Potassium content, as K ₂ O,% w/w, min	33.5	AOAC
3	pH(1% solution),	4.0-5.0	AOAC
4.	Moisture,% w/w, Max	0.5	AOAC
5	Water insolubles, %,w/w.max	0.5	AOAC

The presence of heavy metal contaminants shall not exceed the limits stipulated in Table 2.

Table 2 — Heavy metal contaminants

SL NO	Parameter	Limits, in ppm	Test method
i)	Arsenic, As, max.	20.0	AOAC
ii)	Cadmium, Cd, max.	15	AOAC
iii)	Mercury, Hg, max.	0.1	AOAC
iv)	Selenium, Se, max.	1.0	AOAC
v)	Lead, Pb, max.	30.0	AOAC
vi)	Chromium, Cr, max.	500.0	AOAC

3 Packaging and marking/labelling

3.1 Packaging

3.1.1 The fertilizer shall be packaged in materials that ensure 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

Each packaging container bag shall be marked/ labelled with the following information:

- a) Name of the fertilizer, as “mono potassium phosphate fertilizer”;
- b) Name, address and physical location of the manufacturer/packer/importer;
- c) country of origin/manufacture;
- d) Date of manufacture
- e) The form in which the nutrients are present.

- f) expiry date
- g) the content net weight;
- h) batch/lot number;
- i) Handling instructions.

4 Certificate of analysis

A certificate of analysis shall accompany each consignment.

5 Sampling

This shall be carried as outlined in the ISO standards ISO 8633 and 8634.

ISO 8633-Solid fertilizers -- Simple sampling method for small lots

ISO 8634- Solid fertilizers -- Sampling plan for the evaluation of a large delivery

PUBLIC REVIEW DRAFT