

**Monoammonium phosphate (MAP) and
Diammonium phosphate (DAP) fertilizer —
Specification**

TECHNICAL COMMITTEE REPRESENTATION

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Amiran (K) Ltd
Chemagro Ltd.
Yara East Africa
Kenya Tea Development Agency.
Kenya Plant Health Inspectorate Services (KEPHIS)
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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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PUBLIC REVIEW DRAFT

Monoammonium phosphate (MAP) and Diammonium phosphate (DAP) fertilizers — Specification

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Foreword

This Kenya Standard was prepared by the Technical Committee on Fertilizers and Soil Conditioners under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards.

During the review of this standard the cadmium limit was revised. Reference was made to the following document:

Regulation(EU) 2019 of the European parliament and the Council of laying down rules of making available on the market of EU fertilizing products and amending Regulations(EC) NO 1069/2009 and (EC) NO 1107/2009 and Repealing Regulation (EC)NO.2003/2003. Particularly

Acknowledgement is hereby made for assistance derived from this source.

Monoammonium phosphate (MAP) and diammonium phosphate (DAP) fertilizers — Specification

1 Scope

This Kenya Standard specifies the requirements and prescribes the methods of test for Monoammonium phosphate (MAP) and Diammonium phosphate (DAP) fertilizers.

2 Requirements

2.1 Description

The fertilizer shall be free flowing, granular and free from any foreign matter.

2.2 Physical

Particle size: Not less than 90 % of the material shall pass through 4 mm IS sieve and be retained on 1 mm IS sieve. Not more than 5 % shall be below 1 mm size.

2.3 Chemical

The fertilizers shall comply with the compositional limits specified in Table 1.

Table 1 — Compositional limits for (MAP) and (DAP) fertilizers

Sl no	Characteristic	Requirement/limits		Test method
		MAP	DAP	
i)	Total nitrogen, % (m/m), min.	11	18	AOAC
ii)	Water soluble phosphates as P_2O_5 , % (m/m), min.	44	41	AOAC
iii)	Available phosphates, as P_2O_5 , % (m/m), min.	50	46	AOAC
iv)	Moisture, % (m/m), max.	1.5	1.5	AOAC
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2.4 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	^{a)} AOAC(986-15)
ii)	Cadmium, Cd, max.	30.0	AOAC(986-15)
iii)	Mercury, Hg, max.	0.1	AOAC(986-15)
iv)	Selenium, Se, max.	1.0	AOAC(986-15)
v)	Lead, Pb, max.	30.0	AOAC(986-15)
vi)	Chromium, Cr. Max.	500.0	AOAC(986-15)
^{a)} Recent Association of official Analytical chemists.			

3.0. Packaging and labelling

3.1 Packaging

3.1.1 The fertilizer shall be packaged in materials that ensure the product integrity and quality and protect it 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

Marking/labelling of fertilizer package shall include the following information:

- a) name and physical address of manufacturer/packer/importer;
- b) name of the fertilizer, namely MAP or DAP fertilizer;
- c) guaranteed percentages of nutrient element nitrogen and available phosphates, i.e. N – P₂O₅ – K₂O;
- d) date of manufacture;
- e) expiry date;
- f) the net weight of the fertilizer in the package;
- g) lot number or batch number;
- h) handling and storage instructions;
- i) Country of origin.

4 Certificate of analysis

A certificate of analysis shall accompany each consignment.

5. Sampling

This shall be carried out 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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