

DRAFT UGANDA STANDARD

Second Edition
2017-mm-dd

Potassium chloride (muriate of potash) fertilizer grade— Specification



Reference number
DUS 760: 2017

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Foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to co-ordinate the elaboration of standards and is

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The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of key stakeholders including government, academia, consumer groups, private sector and other interested parties.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.

This Draft Uganda Standard has been developed as a result of a need to provide guidance to industry in production and regulation of Inorganic fertilizers.

The committee responsible for this document is Technical Committee UNBS/TC 2, *Food and agriculture*, Subcommittee SC 20, *Agrochemicals and veterinary drugs*.

This second edition cancels and replaces the first edition (US 760:2017), which has been technically revised.

Potassium chloride (muriate of potash) fertilizer — Specification

1 Scope

This Draft Uganda Standard specifies the requirements, sampling and test methods for potassium chloride (muriate of potash), fertilizer

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 17319, *Fertilizers and soil conditioners — Determination of water-soluble potassium content — Potassium tetraphenylborate gravimetric method*

3 Terms and definitions

For the purposes of this standard, the definitions given in ISO 8157, *Fertilizers and soil conditioners—Vocabulary* shall apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Requirements

4.1 General requirements

- a) Potassium chloride fertilizer shall be in the form of free flowing and non-caking granules or crystalline powder and shall be free from visible impurities.
- b) The particle size (sieve analysis) of potassium chloride fertilizer, when determined in accordance with ISO 8397, shall be such that
 - i) Granules. A minimum of 90 % (m/m) shall pass through a 3.35 mm sieve and be retained on a 1.00 mm sieve.
 - ii) Crystalline powder. Not less than 65% of material shall pass through a 1.7 mm sieve and be retained on a 0.25 mm sieve.

4.2 Chemical requirements

The fertilizer shall conform to the requirements given in Table 1 when tested in accordance with the methods specified therein.

Table 1 — Chemical requirements for potassium chloride, fertilizer grade

Characteristic	Requirement	Method of test
Potash content (as K ₂ O) % m/m, min	60.0	ISO 17319
Sodium content (as NaCl) % m/m, dry basis, max	3.5	AOAC 983.04
Moisture % m/m, max	1.5	AOAC 950.01

4.3 Heavy metal contamination

When tested in accordance with the methods specified therein, the heavy metal contaminants shall not exceed those indicated in Table 2

Table 2 — Limits for heavy metal contaminants

Metal	Maximum limits, mg/kg	Test methods
Arsenic	20	ISO 17318
Cadmium	7	
Mercury	0.1	
Lead	30	
Chromium	500	

5 Packaging

Potassium chloride fertilizer shall be packaged in materials that ensure the product integrity and quality and protect it against physical damage, chemical and moisture contamination.

6 Weights and Measures regulations

The fill of the package shall comply with the weights and measures act

7 Labelling

The following information shall be clearly and indelibly marked in English on each package or container:

- name of the fertilizer as "Potassium chloride or muriate of Potash";
- name, address and physical location of manufacturer/packer/importer;
- minimum potash content as K in percentage by mass;
- date of manufacture;
- expiry date;
- batch/lot number;

- g) the net weight of the fertilizer in the package; in metric units;
- h) storage and handling instructions;
- i) instructions for use;
- j) disposal instructions and;
- k) country of origin.

8 Sampling

Sampling shall be done in accordance with ISO 8633 and ISO 8634

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Bibliography

- [1] US 760: 2007, Potassium chloride (muriate of potash) fertilizer — Specification
- [2] FAO Mineral fertilizer Specifications 2010
- [4] Agricultural Chemicals (Control) Act, 2006 (Act No.1 of 2007)
- [5] The Fertilizer Control Regulations, 2010

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