



Standard Specification for Caustic Potash; Solid (Potassium Hydroxide; Solid)¹

This standard is issued under the fixed designation E1456; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope*

1.1 This specification covers two grades of solid caustic potash, 85 % and 90 %.

1.2 The values stated in SI units are to be regarded as standard. The values given in parentheses are for information only.

1.3 Review the current Materials Safety Data Sheets (MSDS) for detailed information concerning toxicity, first aid procedures, handling and safety precautions.

1.4 The following safety hazards caveat pertains only to the test methods portion, Section 6: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

¹ This specification is under the jurisdiction of ASTM Committee E15 on Industrial and Specialty Chemicals and is the direct responsibility of Subcommittee E15.01 on General Standards.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[E291 Test Methods for Chemical Analysis of Caustic Soda and Caustic Potash \(Sodium Hydroxide and Potassium Hydroxide\)](#)

[E300 Practice for Sampling Industrial Chemicals](#)

3. Classification

3.1 *Type I*—Caustic potash, solid form, 85 % potassium hydroxide.

3.2 *Type II*—Caustic potash, solid form, 90 % potassium hydroxide.

4. Chemical Requirements

4.1 Caustic potash shall conform to the chemical requirements listed in [Table 1](#).

5. Sampling

5.1 Caustic potash shall be sampled in accordance with the appropriate sections of Practice [E300](#) for solid chemicals.

6. Test Methods

6.1 Analyze caustic potash in accordance with the applicable sections of Test Methods [E291](#).

7. Keywords

7.1 caustic potash; potassium hydroxide; solid

*A Summary of Changes section appears at the end of this standard

TABLE 1 Chemical Requirements

Chemical	Type I	Type II
Total alkalinity as KOH, % by mass (weight)	85.0 min	90.0 min
K ₂ CO ₃ , % by mass (weight)	0.8 max	0.8 max
KCl, µg/g (ppm)	150 max	150 max
Fe, µg/g (ppm)	5.0 max	5.0 max

SUMMARY OF CHANGES

Committee E15 has identified the location of selected changes to this standard since the last issue (E1456–97(2002)) that may impact the use of this standard.

- (1) Updated units of measure to comply with the International System of Units (SI). (3) Added Summary of Changes section.
- (2) Added subsection to Scope stating that the SI units are to be considered standard.

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