



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

This standard is issued under the fixed designation E 1456; 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 following safety hazards caveat pertains only to the test methods portion, Section 6, described in this specification: *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.*

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

2. Referenced Documents

2.1 *ASTM Standards:*

E 291 Test Methods for Chemical Analysis of Caustic Soda and Caustic Potash (Sodium Hydroxide and Potassium Hydroxide)²

E 300 Practice for Sampling Industrial Chemicals²

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 *Annual Book of ASTM Standards*, Vol 15.05.

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TABLE 1 Chemical Requirements

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

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 E 300 for solid chemicals.

6. Test Methods

6.1 Analyze caustic potash in accordance with the applicable sections of Test Methods E 291.

7. Keywords

7.1 caustic potash; potassium hydroxide; solid