



Designation: E 402 – 02

Standard Test Method for Spectrographic Analysis of Uranium Oxide (U_3O_8) by Gallium Oxide-Carrier Technique¹

This standard is issued under the fixed designation E 402; 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.

1. Scope

1.1 This test method covers the semiquantitative spectrographic analysis of high-purity U_3O_8 for the 32 elements in the ranges indicated in Table 1. (Quantitative analyses of boron, chromium, iron, magnesium, manganese, nickel, and other impurities can be performed using densitometric methods.)

1.2 The test method can be applied to those samples of uranium and uranium compounds, or both, which can be converted to the black oxide (U_3O_8) and which are of approximately 99.5 % purity or better.

1.3 *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:

¹ This test method is under the jurisdiction of ASTM Committee E01 on Analytical Chemistry for Metals, Ores and Related Materials and is the direct responsibility of Subcommittee E01.02 on Cu, Pb, Zn, Cd, Sn, Be, their Alloys and Related Metals.

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