



Designation: C 1415 – 01

Standard Test Method for ^{238}Pu Isotopic Abundance By Alpha Spectrometry¹

This standard is issued under the fixed designation C 1415; 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 use of alpha spectrometry for determining the ^{238}Pu isotopic abundance in plutonium samples. It is particularly useful for samples in which the ^{238}Pu content is less than 1 % of the total plutonium content. For such samples, mass spectrometric results are less reliable than those from alpha spectrometry because of interference from any ^{238}U isobar remaining after ion exchange.

1.2 *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 C26 on Nuclear Fuel Cycle and is the direct responsibility of Subcommittee C26.05 on Methods of Test. Current edition approved ~~Feb.~~ June 10, 2001. Published ~~April~~ September 2001. Originally published as C 1415 – 99. Last previous edition C 1415 – 99.