



Designation: E 1917 – 9702

Standard Test Method for Determination of Phosphorus in Nickel, Ferronickel, and Nickel Alloys by the Phosphovanadomolybdate Molecular Absorption Spectrometric Method¹

This standard is issued under the fixed designation E 1917; 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 determination of phosphorus in nickel, ferronickel, and nickel alloys in the 0.0007 % through 0.05 % range.

1.2 Arsenic, chromium, hafnium, niobium, silicon, tantalum, titanium, and tungsten interfere, but the interference can be avoided by complexation or volatilization (for Cr). The lowest phosphorus content (0.0007 %) can be reached only in samples with low contents of interfering elements.

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.* For specific hazards associated with the use of this practice see Practices E 50. Refer to specific warning notes given throughout this test method.

2. Referenced Documents

2.1 ASTM Standards:

E 50 Practices for Apparatus, Reagents, and Safety Precautions for Chemical Analysis of Metals²

¹ This practice is under the jurisdiction of ASTM Committee E-1 E01 on Analytical Chemistry of Metals, Ores and Related Materials and is the direct responsibility of Subcommittee E01.08 on Nickel, Cobalt and High Temperature Alloys.

Current edition approved November 10, 1997; 2002. Published June 2003. Originally approved in 19987. Last previous edition approved in 1997 as E 1917-97.