

Thermo Fisher Scientific Ward Hill, MA-Sites

 30 Bond Street
 220 Neck Road
 38 Shelley Road

 Ward Hill
 Ward Hill
 Ward Hill

 MA 01835
 MA 01835
 MA 01835

## CERTIFICATE OF ANALYSIS

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System Standard ISO9001:2015 by TUV SUD America Inc.

Certificate Number. 951001163

Catalogue Number 042829 Lot Number T10L025

Description Vanadium slug, 3.175mm (0.125in) dia x 6.35mm (0.25in) length, 99.8% (metals

basis)

CAS Number 7440-62-2
Quality Test/Release Date 10/Jul/2025
Suggested retest date 10/Jul/2055
Country of Origin China

Result Name	Units	Specifications	Test Value
Assay from Suppliers CofA	%	≥99.8% (metals basis)	99.8
Appearance (Color)		White silver	White silver
Form		Slug, 3.175mm (0.125in) diameter.	Slug, 3.175mm (0.125in) diameter.
LENGTH		6.35mm (0.25in) length.	6.35mm (0.25in) length.

 $\begin{array}{l} \textbf{Additional Information} \ \, \text{Ag} < 0.1 \ , \text{Al} \ \, 450 \ , \text{As} \ \, 5.8 \ , \text{Au} < 0.05 \ , \text{B} \ \, 5.8 \ , \text{Ba} < 0.01 \ , \text{Be} < 0.01 \ , \text{Bi} < 0.005 \ , \text{Br} < 0.05 \ , \text{C} \ \, 34 \ , \text{Ca} \\ < 0.1 \ , \text{Cd} < 0.05 \ , \text{Ce} < 0.005 \ , \text{Cl} \ \, 0.67 \ , \text{Co} \ \, 16 \ , \text{Cr} \ \, 0.13 \ , \text{Cs} < 0.01 \ , \text{Cu} < 0.05 \ , \text{Dy} < 0.005 \ , \text{Er} < 0.005 \ , \text{Eu} < 0.005 \ , \text{F} \ \, 0.17 \ , \text{Fe} \\ 44 \ , \text{Ga} < 0.05 \ , \text{Gd} < 0.005 \ , \text{Ge} \ \, 1.3 \ , \text{H} < 1 \ , \text{Hf} < 0.01 \ , \text{Hg} < 0.1 \ , \text{Ho} < 0.005 \ , \text{I} < 0.01 \ , \text{In} < 0.05 \ , \text{Ir} \ \, 0.03 \ , \text{K} \ \, 0.05 \ , \text{La} < 0.01 \ , \text{Li} \\ < 0.01 \ , \text{Lu} < 0.005 \ , \text{Mg} < 0.01 \ , \text{Mn} < 0.01 \ , \text{Mn} < 0.01 \ , \text{No} \ \, 7.0 \ , \text{No} \ \, 0.08 \ , \text{No} \ \, 0.07 \ , \text{Nd} < 0.005 \ , \text{Ni} \ \, 11 \ , \text{O} \ \, 140 \ , \text{Os} < 0.01 \ , \text{Pe} \\ < 0.01 \ , \text{Pd} < 0.05 \ , \text{Fr} < 0.05 \ , \text{Fb} < 0.01 \ , \text{Re} \ \, 0.08 \ , \text{Rh} < 0.01 \ , \text{Ru} < 0.05 \ , \text{S1} \ \, 3 \ , \text{Sb} < 0.05 \ , \text{Sc} < 0.01 \ , \text{Se} < 0.1 \ , \text{Si} \\ 1300 \ , \text{Sm} < 0.005 \ , \text{Sr} < 0.5 \ , \text{Ta} < 5 \ , \text{Tb} < 0.005 \ , \text{Th} < 0.005 \ , \text{Th} < 0.005 \ , \text{Th} < 0.005 \ , \text{Tm} < 0.005 \ , \text{U} \ \, 0.13 \ , \text{W} \\ 11 \ , \text{Y} < 0.5 \ , \text{Yb} < 0.005 \ , \text{Zr} \ \, 2.6 \ , \text{Values given in ppm unless otherwise specified.} \end{array}$ 

John Astarita Director, Quality

Products are processed under ISO 9001:2015 quality management systems and samples are tested for conformance to the noted specifications. Certain data may have been supplied by third parties. We disclaim the implied warranties of merchantability and fitness for a particular purpose, and the accuracy of third-party data or information associated with the product. Products are for research and development use only. Products are not for direct administration to humans or animals. It is the responsibility of the final formulator or end user to determine suitability, and to qualify and/or validate each product for its intended use.