

Analytical Results	
% Oxygen Mean = 0.1048 St Dev = 0.0081 Exp Uncertainty = 0.0171 k=2, @95% CI, n=40	% Nitrogen Mean = 0.0040 St Dev = 0.0005 Exp Uncertainty = 0.0012 k=2, @95% CI, n=40
% Hydrogen Mean = 0.0117 St Dev = 0.0003 Exp Uncertainty = 0.0008 k=2, @95% CI, n=40	
Method of Analysis: ASTM E 1409-13, ASTM E1447-09	
Primary (NMI)/GUIDE 34/ISO 17034 Reference Standards Employed: NIST SRM: 2453a, 2454, 2454a, 2452, 173c, 173b, 360b, NCS: NS11093, NS11091, NS57101	

**The analytical results above are provided by an accredited reference material manufacturer with a current certification in ISO 17025 and 17034.*

The intended use of this Reference Material (RM) is for the calibration and validation of inert gas fusion, infrared (oxygen) and thermal conductivity (nitrogen, hydrogen) detection analyzers as described in the above ASTM methods.

The minimum sample size to perform this intended use is 1 pin (0.1g nominal), multiple pins may be used per test method requirements.

The Period of Validity for this RM is not able to be determined and should be reviewed every 20 years after the date below.

This bottle contains 10g of 0.1g (nominal) pins to be used per the test method you follow. Keep sealed tightly and store under normal laboratory conditions.

Refer to your test methods and or manufacturer manual for expanded uncertainties, repeatability/reproducibility factors.

For good laboratory practice, we recommend that all reference materials be verified as fit for purpose prior to use. Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd. be liable for incidental or consequential damages.

Certified on the 10th of April 2024.

Elemental Microanalysis Ltd