

Analytical Results

% Oxygen

Mean = 0.114

St Dev = 0.009

Exp Uncertainty = 0.021

(k=2, @95% CI) n=50

% Nitrogen

Mean = 0.0057

St Dev = 0.0013

Exp Uncertainty = 0.0028

(k=2, @95% CI) n=50

% Hydrogen

Mean = 0.0182

St Dev = 0.0007

Exp Uncertainty = 0.0015

(k=2, @95% CI) n=40

Primary (NMI) Reference Standards Employed:

NIST: SRM 173C, 360B, 2454A, 2453A, 2454, 2452

NCS: NS 11093, NS 11091, NS 57101

Method of Analysis: ASTM E 1409-13, ASTM E1447-09

**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 1pin (0.1g nominal).

The Period of Validity for this RM is not able to be determined and should be reviewed every 20 years from 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 26th of April 2024.

Elemental Microanalysis Ltd