

Analytical Results

% Oxygen

Mean = 0.090

St Dev = 0.008

Exp Uncertainty = 0.018

k=2, @95% CI, n=60

% Nitrogen

Mean = 0.0076

St Dev = 0.0013

Exp Uncertainty = 0.0028

k=2, @95% CI, n=60

% Hydrogen

Mean = 0.0080

St Dev = 0.0006

Exp Uncertainty = 0.0013

k=2, @95% CI, n=60

Primary (NMI) Reference Standards Employed:

NIST – SRM 2453a, 2452, 360b, 173c, 173b

NCS – NS57101

BAS – 356

BCR – 24/24c

Method of Analysis: ASTM E1409-13, 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 analyzers with infrared (oxygen) and thermal conductivity (nitrogen, hydrogen) detection as described in the above ASTM methods.

Refer to test method recommendations for an appropriate sample size. Multiple pins may be used per test method requirements with a minimum sample size of 1 pin.

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 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 May 2024.

Elemental Microanalysis Ltd