

Analytical Results

% Oxygen

Mean = 0.128

Standard Deviation = ± 0.007
Expanded Uncertainty = ± 0.015
(k=2, @95% confidence) (n=47)

% Nitrogen

Mean = 0.0067

Standard Deviation = ± 0.0009
Expanded Uncertainty = ± 0.0020
(k=2, @95% confidence) (n=45)

% Hydrogen

Mean = 0.0023

Standard Deviation = ± 0.0002
Expanded Uncertainty = ± 0.0005
(k=2, @95% confidence) (n=45)

Primary (NMI)/ISO 17034 references used for traceability:

NIST SRM: 2452, 360b

BCR: 276, 024c

NCS: NS11093, NS57101, NS11091

Method of Analysis is ASTM E 1409-13R21, E 1447-22

**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).

The Period of Validity for this RM is not able to be determined and should be reviewed 25 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 24th of October 2023.

Elemental Microanalysis Ltd.