Certificate of Analysis

Orchard Leaves OAS Cat No. B2141 – Certificate No. 326600

General

This Organic Analytical Standard (OAS) consists of a homogenous batch of Orchard Leaves plant tissue powder for use as a routine working analytical standard for the determination of Carbon, Nitrogen, Hydrogen and Sulphur.

Certified Values and Uncertainty

The uncertainty in the certified value is expressed as expanded uncertainty, U, at 95% confidence and is calculated in accordance with ISO/IEC17025 according to GUM (Guidelines to Uncertainty in Measurement). Confidence limits include those due to sampling variation, weighing, calibration and measurement errors. The certified values are based upon the results of 20 determinations.

Standards used in the certification of this material

NIST SRM Cystine 143d @ 29.99%C, 5.03%H, 11.66% N, 26.69%S EMA B2273 Alfalfa @ 42.78%C, 5.79%H, 2.52%N, 0.25%S

| Values (Dried Basis) | Element | Certified value %w/w | Uncertainty (+/-%) |
|-------------------------|----------|-------------------------|--------------------|
| | Carbon | 46.54 | 0.23 |
| | Hydrogen | 5.91 | 0.09 |
| | Nitrogen | 3.38 | 0.14 |
| | Sulphur | 0.156 | 0.011 |

Drying instructions

A separate portion of this calibration material must be dried for two hours at 85°C prior to analysis. The dried sample should be stored in a desiccator and must be used within 24 hours. Any unused portion of the dried sample should be discarded.

At time of certification, moisture content was approx. 3.5%

Expiration of Certification

The certification of this OAS is valid until 5-Mar-22 within the measurement uncertainties specified.

Storage and use

This OAS should be stored between 20° C to 25° C and should be kept tightly sealed away from light and moisture.

The technical aspects involved in the preparation, certification and issuance of this (In)Organic Analytical Standard (IAS/OAS) were carried out for and on behalf of Alpha Resources LLC, 3090 Johnson Rd. Stevensville, MI 49127 T:269-465-5559F:269-465-3629 Email: sales@alpharesources.com

