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Certificate of Analysis

Catalogue No: R66030
Material Name: Caffeine
Expiry Date: 25 April 2028

Intended Use

This Organic Analytical Standard (OAS) consists of a purified and homogeneous batch of Caffeine for use as a routine working microanalytical standard for the determination of Carbon, Hydrogen, Nitrogen and Oxygen.

Certified Values and Uncertainty

The uncertainty of 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 for Carbon, Hydrogen and Nitrogen were determined by elemental analyser calibrated to Acetanilide 141d from National Institute of Standards and Technology (NIST), Maryland, USA.

The certified values for Oxygen were determined by elemental analyser calibrated to Acetanilide 141d from National Institute of Standards and Technology (NIST), Maryland, USA.

Element Determined	Certified Value %	Uncertainty at 95%	Theoretical Value %
Carbon	**49.48**	**0.20**	**49.48**
Hydrogen	**5.16**	**0.08**	**5.19**
Nitrogen	**28.83**	**0.20**	**28.85**
Oxygen	**16.47**	**0.19**	**16.48**

Storage

This OAS should be stored at temperatures between 20°C to 25°C and should be kept tightly sealed away from light and moisture. It is non-hygroscopic under normal conditions and can be used without preliminary drying.

Expiry Date

This working standard should not be used after the date given above. Properly stored and unopened this standard will remain within the specified uncertainty up to and beyond the expiry date.

General Information

This working standard is directly traceable to the international standard(s) given above. For GLP it is recommended that this working standard be verified prior to use. Certified values were determined by combustion TCD/FPD elemental analysis,combustion ion chromatography or acid digestion spectrophotometry. In no event shall OEA Laboratories Limited be liable for incidental or consequential losses or damages through the use of this product. For hazard information refer to Safety Data Sheets available upon request from OEA Laboratories Limited.