

## Acetanilide CRM

### CatNo B2904 & B2905

### Certificate No 424575

#### General

This Certified Reference Material (CRM) consists of a homogeneous batch of Acetanilide for use as a primary/certified reference material for the determination of Carbon, Hydrogen, Nitrogen and Oxygen in the calibration of elemental analysers.

#### 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 (Uncertainty of Measurement – Part 3: Guide to the expression of uncertainty in measurement) and BS EN ISO/IEC17034. Confidence limits include those due to material stability, homogeneity, weighing, calibration and measurement errors. The certified values are based upon the results of 26 determinations.

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

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

#### As bottled values

Element	Certified Value (%w/w)	Uncertainty (+/- %w/w)
Carbon	71.06	0.38
Hydrogen	6.69	0.09
Nitrogen	10.35	0.08
Oxygen	11.84	0.13

#### Theoretical Value (%w/w) \*

71.09
6.71
10.36
11.84

*\*Theoretical values are provided as indicative values only. Values calculated from chemical formula assuming 100% purity, using standard atomic weights as stated by IUPAC (International Union of Pure and Applied Chemistry).*

#### Expiration of Certification

This CRM was certified on 12-Aug-25. The certification is valid until 11-Aug-30 within the measurement uncertainties specified.

#### Storage and Use

This CRM should be stored at temperatures below 33°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.

The minimum sample size per use is 2-3mg to guarantee the property value associated uncertainty. GLP should be adhered to, to prevent contamination.

See Safety Data Sheet at [www.elementalmicroanalysis.com](http://www.elementalmicroanalysis.com) for Health and Safety Information.

#### Certification Information

The technical aspects involved in the preparation, certification and issuance of this (In)Organic Analytical Standard (IAS/OAS) CRM were carried out at Elemental Microanalysis Limited, Okehampton, Devon, EX20 1UB, UK,  
Tel +44 1837 54446, Fax +44 1837 54544, Email [info@microanalysis.co.uk](mailto:info@microanalysis.co.uk).

This Certified Reference Material was manufactured and produced to the requirements of ISO/IEC17034, in compliance with the requirements of ISO Guides 31 and 35 for the production of Reference Materials.

For and on behalf of  
Elemental Microanalysis Limited

Martin Trerise  
Compliance Manager

