

# Certificate of Analysis

## CERTIFIED REFERENCE MATERIAL Organic substance

Ref No: SB74.5000.5000 Lot No: XXXXXX

Certification Date: XXXXXXXXXXXX

Barcode: XXXXXXXXX

Description of the Reference Material (CRM): Acetone

CAS No: 67-64-1

Empirical formula:  $C_3H_6O$

MW: 58.079

Certified Purity/ Uncertainty: 99.9 +/- 0.1 %

Expiry date: XXXXXXXXXXXX

Method of certification: CRM's calibration procedure (WQP 5.15.1/22)

The following methods of analysis are used to determine purity: GC/MS

### Analytical Data:

GC Conditions:

|                  |                                                 |          |             |      |
|------------------|-------------------------------------------------|----------|-------------|------|
| Column           | Agilent CP9105 J&W VF-624ms 60m, 0.32mm, 1.80µm | Oven     | Temperature | Hold |
| Flow rate        | 1.6 ml/min                                      | Initial  | 50°C        | 0    |
| Injector         | 200 °C                                          | 5°C/min  | 100°C       | 2    |
| Injection volume | 1µl split                                       | 20°C/min | 160°C       | 1    |
| Carrier gas      | He, constant flow                               |          |             |      |

MS Conditions:

|               |       |                 |      |
|---------------|-------|-----------------|------|
| Transfer line | 180°C | Ionization mode | EI   |
| MS Source     | 230°C | Mode            | Scan |
| MS Quad       | 150°C |                 |      |

### Concept of Certification and traceability statement:

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA 4/02.

Metrological traceability is established through in-house validated method.



The measurement results are traceable to SI.

**Intended use:**

***For Laboratory Use Only***

This CRM is intended for:

- Calibration of TLC, GC/FID, GC/TCD, GC/ECD, GC/MS, GC/MS/MS, LC/UV, LC/MS and LC/MS/MS
- Validation of analytical methods
- Preparation of "working reference samples"
- Detection limit and linearity studies

This statement is not intended to restrict the use for other purposes.

**Instructions for the correct use of this reference material:**

This CRM can be used directly or can be diluted in an appropriate solvent. Only a clean glassware should be used.

**Stability and storage:**

This CRM is with a guaranteed purity  $\pm 2\%$  deviation prior to the expiration date. Even if the product is stable at normal laboratory conditions, in order to increase its stability, we highly recommend it: Store under normal laboratory conditions, at temperatures between 15° to 25°C .

Product should be used shortly after opening to avoid concentration changes due to evaporation. Warranty does not apply to ampoules stored after opening.

**Hazardous situation:**

The normal laboratory safety precautions should be observed when working with this CRM. Further details for the handling of this chemical are available as safety data sheet.

**Level of homogeneity**

The material was tested for homogeneity by analyzing randomly selected samples according to an in-house procedure. The level of homogeneity proved satisfactory for a sample volume of min. 2 mg. The uncertainty incorporates the sample standard deviation combined with the uncertainty calculated from homogeneity and stability studies.

This certificate relates solely to the lot number given above.

All processes (including generating of this certificate) are completely controlled by the specialized Computer-Aided-Manufacturing (CAM) software.

This Certified Reference Material was produced under a quality management system that is:

- Registered to ISO 9001 Quality Management System (Lloyd's Register Quality Assurance Ltd Cert No 0039638)
- Accredited according to ISO/IEC 17025 – Testing (ANAB Cert No AT-1836)
- Accredited according to ISO 17034 - Reference Material Producer (ANAB Cert No AR-1835)

This document is designed and the certified value and uncertainty are determined in accordance with ISO Guide 31, ISO Guide 35, and Eurachem / CITAC Guides

**Names of certifying officers:**

Laboratory:  Margarita Dimitrova

Manager: Krassimira Taralova

End

## Area Percent Report

Data Path : C:\DATA\2020\09.2020\  
Data File : Acetone-157-41384435-s5.D  
Acq On : 2 Sep 2020 14:09  
Operator : MD  
Sample : Acetone-157-41384435-s5  
Misc :  
ALS Vial : 50 Sample Multiplier: 1

Integration Parameters: autoint1.e  
Integrator: ChemStation

Method : C:\METHODS\Quant\709487.M  
Title :

Signal : TIC: Acetone-157-41384435-s5.D\data.ms

| peak<br># | R.T.<br>min | first<br>scan | max<br>scan | last<br>scan | PK<br>TY | peak<br>height | corr.<br>area | corr.<br>% max. | % of<br>total |
|-----------|-------------|---------------|-------------|--------------|----------|----------------|---------------|-----------------|---------------|
| 1         | 5.769       | 393           | 417         | 474          | M        | 9316670        | 357983004     | 100.00%         | 99.883%       |
| 2         | 8.152       | 1021          | 1045        | 1071         | M4       | 14755          | 417790        | 0.12%           | 0.117%        |

Sum of corrected areas: 358400794

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