## **Certificate of Analysis**

Dr. Ehrenstorfer

Reference Materials for Residue Analysis

Expiry Date 27.08.2020

Lot Number 40819

Store at 20 °C ±4 °C

**Product Identification** 

10861410 1-Butanethiol

CA 1-Butanethiol

IUPAC 1-Butanethiol

Formula C4H10S

Mol.Weight 90.19

CAS No. 109-79-5

Please note: The expiry date is valid under recommended storage conditions only.

## Toxicological Data









R Code 11-20/22-36/37/38 S Code 16-45-26-23-38-36/39

## **Physical Data**

Phase liquid

Color colourless

Melt.Range

Vapour pressure NA at °C Solubility in water N/A g/l at °C

Boiling Range (lit.)

LD50 (Rats female/male in mg/kg) N/A Analytical Data

Detection: GC/FID

Column: DB-5, 30 m, ID 0.25 mm

Inj.-Vol.:

 $1.00 \mu$ l

Flow:

1.0 ml/min

Ret.-Time: 5.86 min.

Method Details:

Injector: 100° C

Start Temperature: 40° C for 5 min End Temperature: 100° C for 2 min

Gradient: 15° C/min

Identity: RT

Comment Purity was confirmed by external standard method.

No chromatogram available.

Water Content

Determined by Karl-Fischer Titration

Det. Purity

99.5 %

Tolerance/Uncertainty +/- 0.5 %

The uncertainty/tolerance of this standard is calculated in accordance with the EURACHEWCITAC Guide - Quantifying Uncertainty in Analytical Measurement - Second Edition. The uncertainty given is the expanded combined uncertainty and represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The expanded uncertainty is U which is Uc(y)\*K, where K is the coverage factor at the 95% confidence level (K=2). The expanded uncertainty is based on the combination of uncertainties associated with each individual operation involved in the preparation of this product.

Certified on 27.08.2014

by M. Beck

M. Beck

The Laboratory LGC Labor GmbH is accreditated by DAkkS as indicated by the Accreditation Number D-RM-14174-01 has shown competence based on ISO Guide 34:2009 with relevant parts of DIN EN ISO/IEC 17025:2005 for production of certified reference materials in form of organic pure substances and in form of single and multi-component solutions organic pure substances.