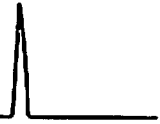


Certificate of Analysis

Dr. Ehrenstorfer



Product Identification

14866020 (-)-Menthol
CA 5-Methyl-2-(1-methylethyl)cyclohexanol
IUPAC (1R,2S,5R)-2-Isopropyl-5-methylcyclohexanol
Formula C₁₀H₂₀O
Mol.Weight 156.27
CAS No. 2216-51-5

Reference Materials for Residue Analysis

Expiry Date 21.08.2013
Lot Number 90720
Store at 20 °C ±4 °C

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

Toxicological Data



R Code 37/38-41
S Code 22-25
LD50 (Rats female/male in mg/kg) 3300

Physical Data

Phase crystalline solid
Color colourless
Melt.Range 42,7 °C
Vapour pressure NA at °C
Solubility in water insol. g/l at °C
Boiling Range (lit.)

Analytical Data

Detection: GC/FID
Column: DB-5, 30 m, ID 0.25 mm
Inj.-Vol.: 1,00 µl
Flow: 1,0 ml/min
Ret.-Time: 10,15 min.

Method Details:
Injector: 280° C
Start Temperature: 60° C for 4 min
End Temperature: 280° C for 4 min
Gradient: 15° C/min

Identity:
Comment

Water Content 0,2 % 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 EURACHEM/CITAC 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 $Uc(y) \cdot K$, 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 15.09.2009

by Dr. H. Meinholz

H. A. C. Meinholz



The Laboratory Labor Dr. Ehrenstorfer-Schäfers is accredited by DGA as indicated by the Accreditation Certificate DGA-PL-4536.00 based on DIN EN ISO/IEC 17025:2005 for the weighing of amounts of substances for the preparation of standard solutions.

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The warranty for this product is limited to the purchasing price of this product.



DGA-PL-4536.00

Chromatogram

15

Sample Name : (-)-Menthol,100ng,pek

Sample #: 022

Page 1 of 1

FileName : D:\TC-Daten\Daten\2009\08\14866020_90720_90821AL-001.raw

Date : 25.08.2009 14:16:26

Method : Time of Injection: 25.08.2009 01:23:02

Start Time : 9,37 min End Time : 11,31 min Low Point : 1,97 mV High Point : 42,35 mV

Plot Offset: 1,97 mV Plot Scale: 40,4 mV

