Certificate of Analysis

Dr. Ehrenstorfer

Reference Materials for Residue Analysis

Product Identification

20940000 1,2,3,4-Tetrahydronaphthalene

CA Naphthalene,1,2,3,4-tetrahydro-

IUPAC 1,2,3,4-Tetrahydronaphthalene

Formula C10H12

Mol.Weight 132.21

CAS No. 119-64-2

Expiry Date 30.01.2019

Lot Number 30121

Store at 20 °C ±4 °C

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

Toxicological Data

R Code 19-36/38-51/53

S Code 26-28

LD50 (Rats female/male in mg/kg) 1570

Physical Data

Phase	liquid	Vapour pressure N/A at °C
Color	colourless	Solubility in water N/A g/l at °C
Melt.Range		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: **14.17 min.**

Method Details:

Injector: 200° C

Start Temperature: 40° C for 5 min

End Temperature: 200° C for 16 min

Gradient: 15° C/min

Identity: RT

Comment Purity was determined by external standard method.

Water Content 0.1 % Determined by Karl-Fischer Titration

Det. Purity 99.0 % Tolerance/Uncertainty +/- 1.0 %

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)*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 30.01.2013

by A. Storr

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.

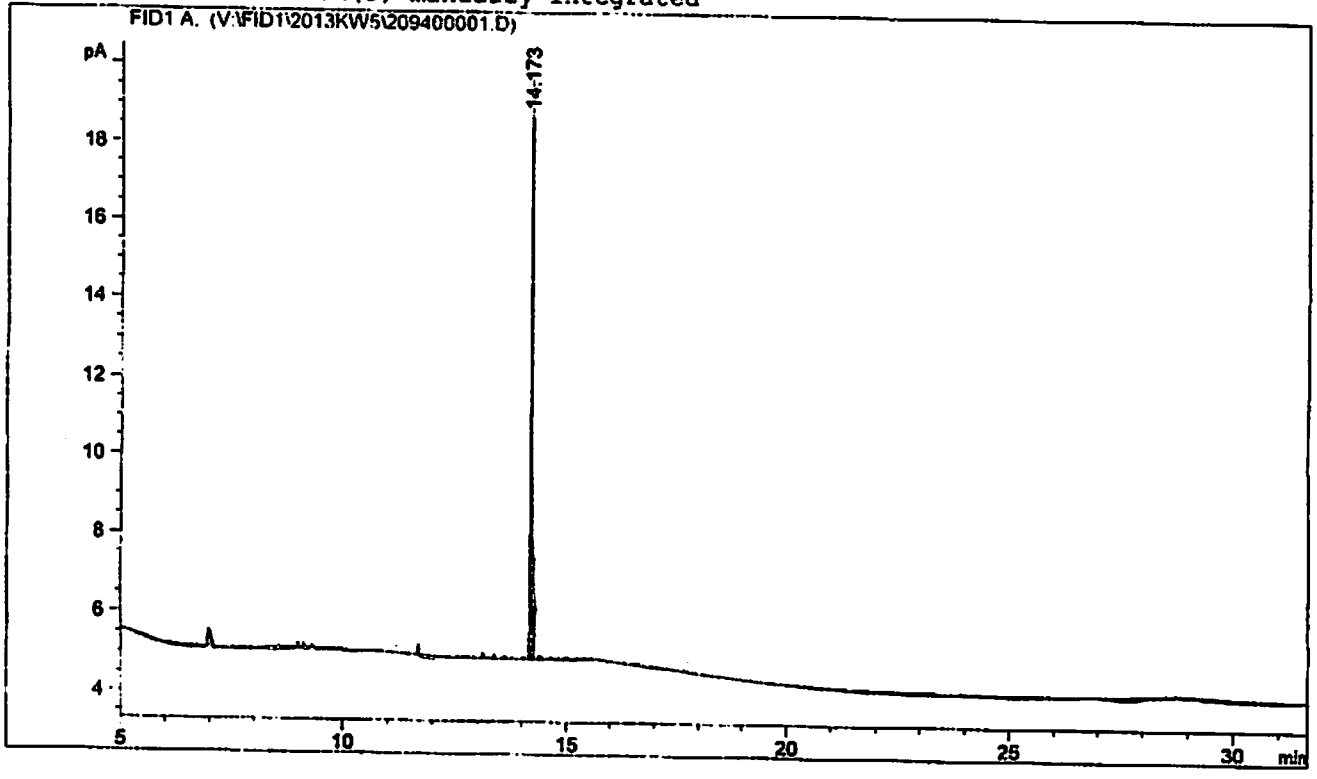
LGC Labor GmbH · Bgm.-Schlosser-Str. 6 A · 86199 Augsburg · Germany
Phone +49 821 906080 · Fax +49 821 9060888 · info@analytical-standards.com

Data File V:\FID1\2013KW5\209400001.D
Sample Name: 30128ME 30121

Müller
30.01.13

Acq. Operator	:	Seq. Line	: 20
Acq. Instrument	: GCFID1	Location	: Vial 33
Injection Date	: 29.01.2013 23:33:24	Inj	: 1
		Inj Volume	: 1.000 µl
Acq. Method	: C:\CHEM32\1\METHODS\200.M		
Last changed	: 18.12.2012 11:59:50		
Analysis Method	: V:\FID1\METHODS\200.M		
Last changed	: 30.01.2013 14:08:45 by DAD3 (modified after loading)		
Method Info	: 200		
Sample Info	: 1,2,3,4-Tetrahydronaphthalene		

Additional Info : Peak(s) manually integrated



Area Percent Report

Sorted By : Retention Time
Multiplier: : 1.0000
Dilution: : 1.0000
Use Multiplier & Dilution Factor with ISTDs

Signal 1: FID1 A,

Peak #	RetTime [min]	Sig	Type	Area [pA*s]	Height [pA]	Area %
1	14.173	1	BB	22.64984	14.70523	100.0000
Totals :				22.64984	14.70523	