

Certificate of Analysis

Dr. Ehrenstorfer

Reference Materials for
Residue Analysis

Product Identification

11042000 (1S)-(+)-3-Carene

CA Bicyclo[4.1.0]hept-3-ene, 3,7,7-trimethyl-, (1S,6R)-

IUPAC (1S)-3,7,7-Trimethylbicyclo[4.1.0]hept-3-ene

Formula C₁₀H₁₆

Mol.Weight 136.23

CAS No. 498-15-7

Expiry Date 13.08.2018

Lot Number 40731

Store at 4 °C ±4 °C

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

Toxicological Data



R Code

S Code

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

Physical Data

Phase liquid

Color colourless

Melt.Range

Vapour pressure N/A at °C

Solubility in water N/A 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: 11.60 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 confirmed by external standard method.

Water Content

Determined by Karl-Fischer Titration

Det. Purity 99.1 %

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 13.08.2014

by M. Beck

The Laboratory LGC Labor GmbH is accredited by DAkkS as indicated by the Accreditation Number D-RM-19883-01 & D-PL-19883-01 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.

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

Sample Name: 40807ME 40731

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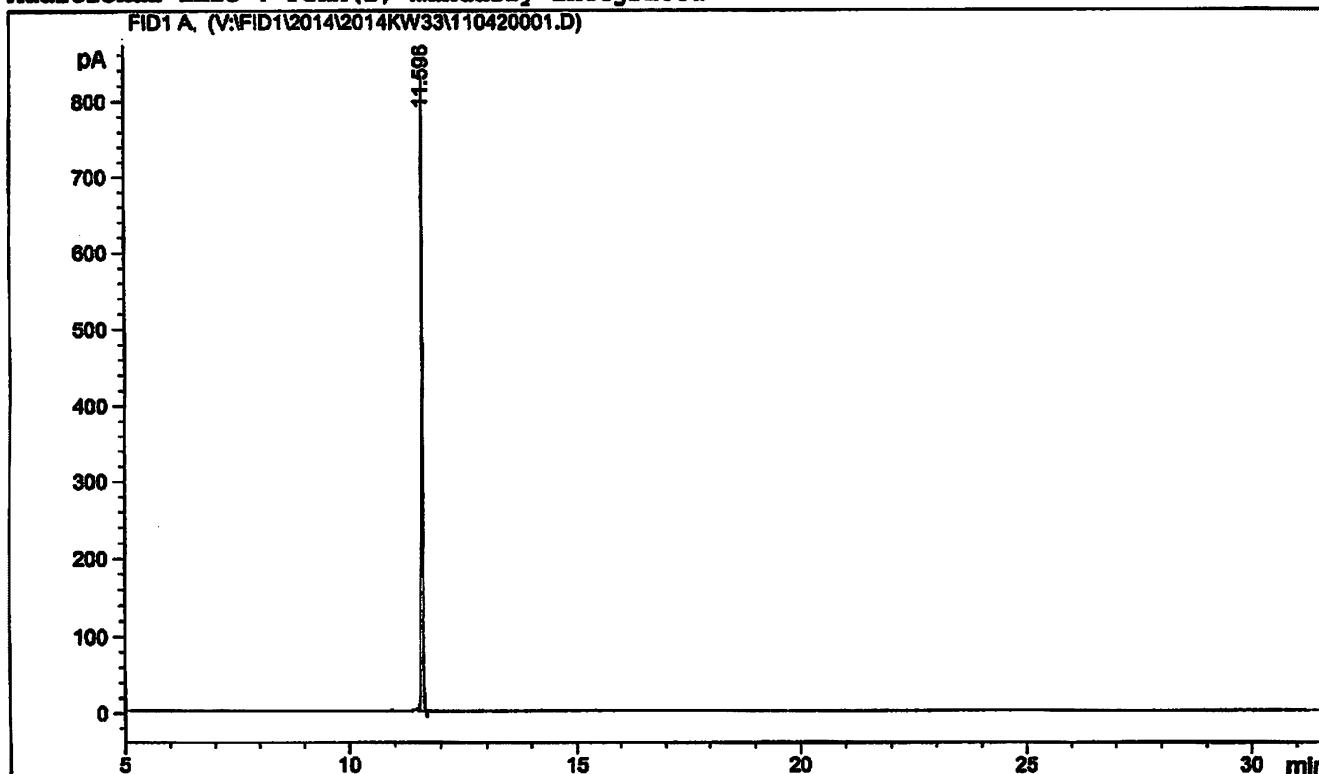
=====
Acq. Operator   :                               Seq. Line :    5
Acq. Instrument : GCFID1                       Location  : Vial 84
Injection Date  : 11.08.2014 20:30:54         Inj       :    1
                                                Inj Volume: 1.000 µl

Acq. Method     : C:\CHEM32\1\METHODS\200.M
Last changed    : 04.07.2013 15:13:05
Analysis Method : V:\FID1\METHODS\200.M
Last changed    : 12.08.2014 08:01:36
                  (modified after loading)
Method Info     : 200

Sample Info     : (1S) - (+) -3-Carene

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Additional Info : Peak(s) manually integrated



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

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Ben

Signal 1: FID1 A,

Peak #	RetTime [min]	Sig	Type	Area [pA*s]	Height [pA]	Area %
1	11.596	1	BV	1666.77771	824.58026	100.0000

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Totals :                1666.77771  824.58026
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