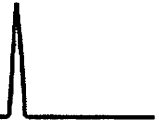


Gravimetric Certificate

Dr. Ehrenstorfer



Product Identification

13545000 (E)-Fenpyroximate
Formula C₂₄H₂₇N₃O₄
Mol.Weight 421.5
CAS No. 134098-61-6

Reference Materials for Residue Analysis

Expiry Date 14.01.2017
Lot Number 40114AL
Store at 20°C in the dark

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

Gravimetric Data				
Product Name (E)-Fenpyroximate		Conc. (mg/l) 10.000	Purity % 99.0	Weight (mg) 1.012
Solvent Information				
Solvent Acetonitrile	Lot No. 30317	Exact Quantity (ml) 100.00		
Traceability Data				
13545000 20815	neat product			
13545000 40114AL	10.000 mg/l			
Analytical Data				
Detection: HPLC/DAD	Method Details:			
Column: ReproSil 100 C18 5µ 250x3	Acetonitrile:H ₂ O 9:1			
Inj.-Vol.: 10.00 µl				
Flow: 1.0 ml/min				
Ret.-Time: 3.03 min.				
Identity check UV, RT				
Comment				
The uncertainty/tolerance of this standard is +/- 2.0 %, 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 22.01.2014

by P. Feuerriegel

The Laboratory Labor Dr. Ehrenstorfer-Schäfers is accredited 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.

Labor Dr. Ehrenstorfer-Schäfers · Bgm.-Schlosser-Str. 6 A · 86199 Augsburg · Germany

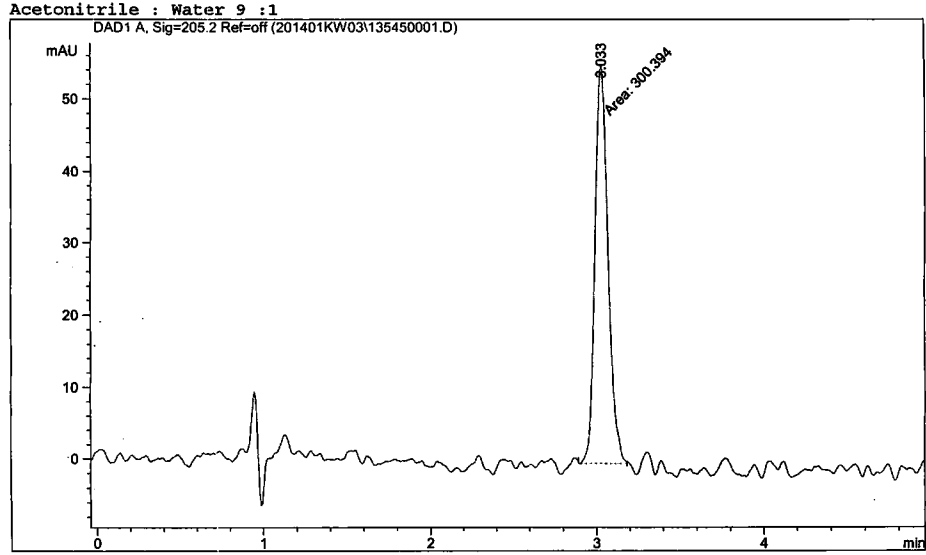
Phone +49 821 906080 · Fax +49 821 9060888 · info@analytical-standards.com

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

MM

(E)-Fenpyroximate

=====
Injection Date : 16.01.2014 09:26:35 Seq. Line : 44
Sample Name : 40114AL Location : Vial 71
Acq. Operator : DAD1_Admin Inj : 1
Acq. Instrument : Instrument 1 Inj Volume : 10 µl
Acq. Method : D:\CHEM32\1\METHODS\91K.M
Last changed : 27.12.2013 07:59:04 by DAD1_Admin
Analysis Method : D:\CHEM32\1\METHODS\91K.M
Last changed : 17.01.2014 10:08:35 by DAD1_Admin
(modified after loading)



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

Signal 1: DAD1 A, Sig=205,2 Ref=off

Peak #	RetTime [min]	Sig	Type	Area [mAU*s]	Height [mAU]	Area %
1	3.033	1	MM T	300.39432	55.48316	100.0000

Totals : 300.39432 55.48316

=====
*** End of Report ***
=====

1. Application:

This standard solution is designed for calibration or recalibration of chromatographic systems for the determination of the specified chemical compounds concerning identity and quantification. The product can also be used as reference material for interlaboratory studies to validate analytical procedures.

2. Raw material:

All raw materials used to prepare this standard solution are of the highest purity. After our production process each material is checked by several of the following methods, if applicable: UV-, IR-Spectroscopy, Elemental analysis, chromatographical properties (GC/FID, GC/ECD, GC/MSD, HPLC/DAD, HPLC/MSD, TLC) and physical properties (phase, colour, odor, melting point) and Karl-Fischer for detection of traces of water.

3. Manufacturing:

Prior to the production for each standard solution we calculate the necessary weight of the neat material, compensate the difference of the purity of the compound to 100%. We use an electronic scale capable of weighing to 0,000001 g with a built in automatic calibration function, which is executed minimum once a week. Once a month the balance is calibrated with weights complying with the OIML-IR-20 design requirements and traceable to the national prototype of the Physikalisch-Technische Bundesanstalt, Braunschweig, the German office of weights and measurements. Every year the balance is calibrated by the manufacturer service technician. This company is also certified by the DQS following ISO9001. All steps are documented conform to ISO 9001 requirements. The single components are weighed and filled into volumetric flask (class A glassware) with the exact quantity of solvent as indicated on the certificate. Solvents are stored and handled in special rooms, which have the constant ambient temperature required from the manufacturer of the volumetric equipment. The tolerance of the weighing procedure and the dilution error adds to a maximum of +/- 1.0 %.

4. Packaging and Storage:

The final formulation was packaged in amber glass ampoules and then sealed to prevent photodegradation and evaporation. Every reference material is stored under controlled condition. One sample of each lot is kept according GLP rules to allow a recheck of the specific lot even years after the last item was sold.

5. Stability:

In regular intervals each lot is checked for stability. We guarantee the stability of the solution until the date of expiry given on the Gravimetric Certificate. In case, that the tests show a degradation within the shelf life period, the customer will be notified by Dr. Ehrenstorfer. We recommend to store the ampoules in the dark at 20° C +/- 4°C.

6. Gravimetric Certificate:

The documentation gives all the data of the production process with all the information necessary for traceability of each lot. Following GLP rules you are obliged to note the used product, lot number of the product, purity, exact weight/quantity of the product, name of the solvent, lot number of the solvent, exact quantity of the solvent, date of production, date of expiry and signature of the person in charge. Copies have to be authorized by stamp, signature of the person in charge according to your quality management handbook and date of authorization.

7. Analytical Quality Control:

The summary of the quality control procedure is documented in the separate Certificate of Analysis. Our company holds the Quality System Certificate DQS-Reg.No.:2874-01 for the standard from the ISO 9001 / EN 29000 series and the scope as specified. The audit performed by the DQS has verified, that our quality system fulfills the requirements of DIN ISO 9001.

The Laboratory Labor Dr. Ehrenstorfer-Schäfers is accredited 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.