Certificate of Analysis

Dr. Ehrenstorfer

Reference Materials for Residue Analysis

Product Identification

11510000 Chlorothalonil

CA 2,4,5,6-Tetrachloro-1,3-benzenedicarbonitrile

IUPAC Tetrachloroisophthalonitrile

Formula C8Cl4N2

Mol.Weight 265.91

CAS No. 1897-45-6

Expiry Date 29.10.2018

Lot Number 21029

Store at 20 °C ±4 °C

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

Toxicological Data



R Code 26-37-40-41-43-50/53

S Code 28-36/37/39-45-60-61

LD50 (Rats female/male in mg/kg) >10000

Physical Data

Phase	crystalline solid	Vapour pressure 1.3 Pa at 40 °C
Color	colourless	Solubility in water 0.0006 g/l at 25 °C
Melt.Range	253.1 °C	Boiling Range (lit.)

Analytical Data

Detection:	HPLC/DAD	Method Details:	
Column:	ReproSil 100 C18 5µ 250x3	Acetonitrile:H2O 4:1	
Inj.-Vol.:	10.00 µl		
Flow:	1.0 ml/min		
Ret.-Time:	**2.08 min.**		

Identity: RT, UV

Comment Purity was confirmed by external standard method.

Water Content 0.0 % Determined by Karl-Fischer Titration

Det. Purity 98.5 % 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 10.01.2013

by P. Feuerriegel i.V. M. Bauer

The Laboratory Labor Dr. Ehrenstorfer-Schäfers 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.

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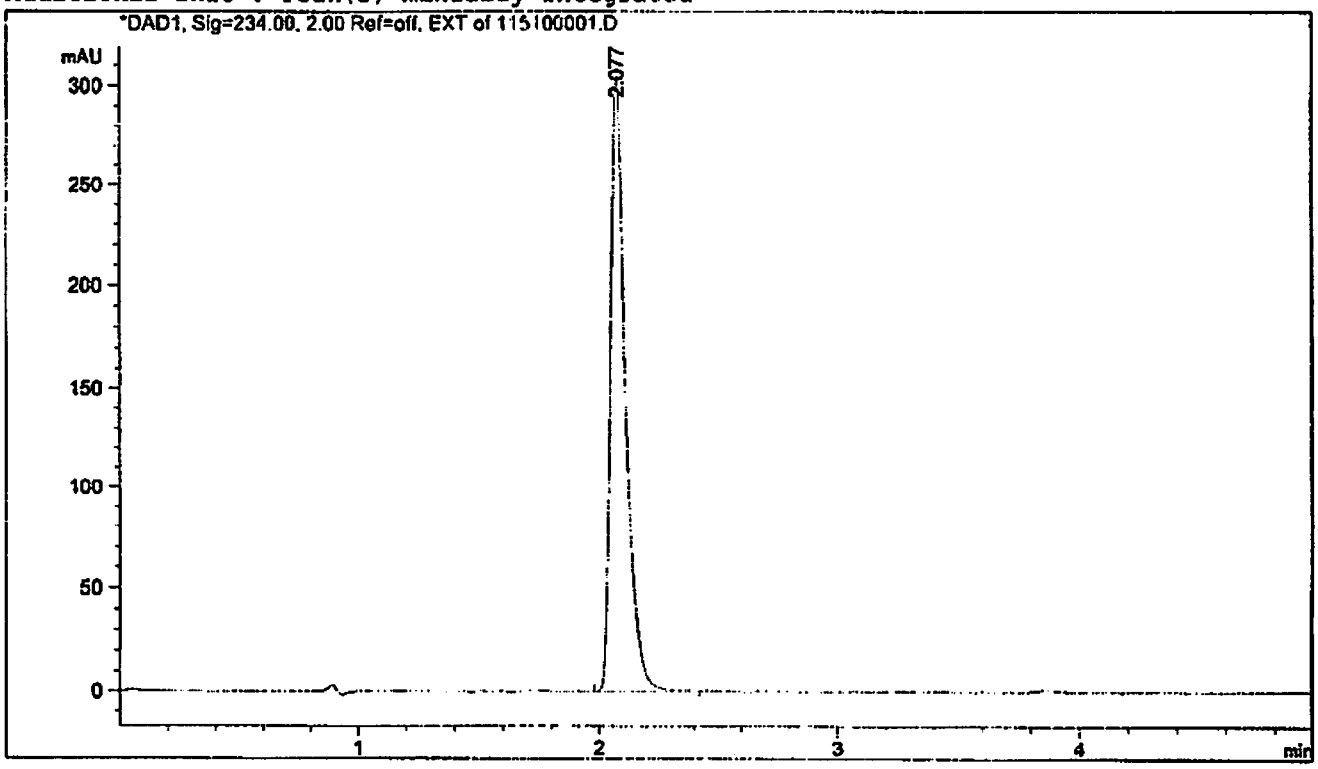
The warranty for this product is limited to the purchasing price of this product.

Data File V:\DAD1\201301KW02\115100001.D
Sample Name: 21029AL 21029

Gadway 10.1.13

Acq. Operator	: DAD1	Seq. Line	: 51
Acq. Instrument	: DAD1	Location	: Vial 78
Injection Date	: 09.01.2013 19:56:17	Inj	: 1
		Inj Volume	: 10.000 µl
Acq. Method	: D:\CHEM32\1\METHODS\41K.M		
Last changed	: 01.06.2012 12:54:34 by Dr. Heidrich		
Analysis Method	: V:\DAD1\METHODS\41K.M		
Last changed	: 10.01.2013 11:44:35 by DAD3 (modified after loading)		
Method Info	: Acetonitrile : Water 4:1		
Sample Info	: Chlorothalonil		

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: DAD1, Sig=234.00, 2.00 Ref=off, EXT
Signal has been modified after loading from rawdata file!

Peak #	RetTime [min]	Sig	Type	Area [mAU*s]	Height [mAU]	Area %
1	2.077	1	BB	1316.59351	306.29037	100.0000
Totals :				1316.59351	306.29037	