

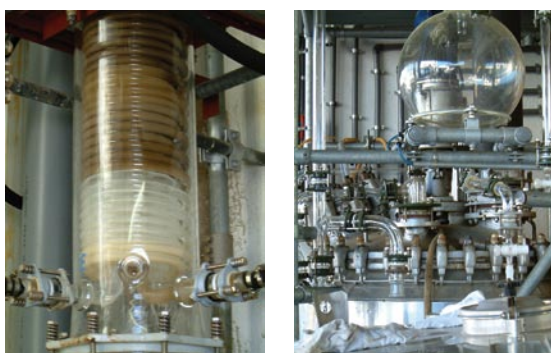
GC residue grade solvents

Highly purified solvents ■ New and tighter specifications ■ Bottled under special conditions ■ Strict quality control

As more sensitive capillary GC and HPLC chromatographic methods are introduced, solvent purity must be improved to meet the more stringent analytical requirements. According to this, our pesticide residue analysis solvents have evolved to become our newly named “GC residue grade solvents”, which are extremely high-purified solvents, not only suitable for the analysis of pesticides, but also for other organic residues in environmental analysis.

Highly purified solvents

Our GC residue grade solvents are specially purified in a multi-step process using only glassware equipment. Inert conditions are kept during bottling to assure optimum performance and to avoid any possibility of contamination.



New and tighter specifications

We have tightened our specifications to assure that no interference peaks appear in the low boiling range and we guarantee that:

No GC-ECD sensitive interference peaks greater than 3 ppt expressed as lindane appear in the high boiling range (from lindane to decachlorobiphenyl). This assures suitability for organochlorine pesticides analysis.

No GC-ECD sensitive interference peaks greater than 3 ppt expressed as lindane appear in the low and medium boiling range (from 1,2,4-trichlorobenzene to lindane). This assures suitability for high volatile halocarbon analysis.

We have lowered the level of acceptable impurities from 5 ppt down to 3 ppt of lindane, which is used as internal standard in our quality control analysis.

Bottled under special conditions

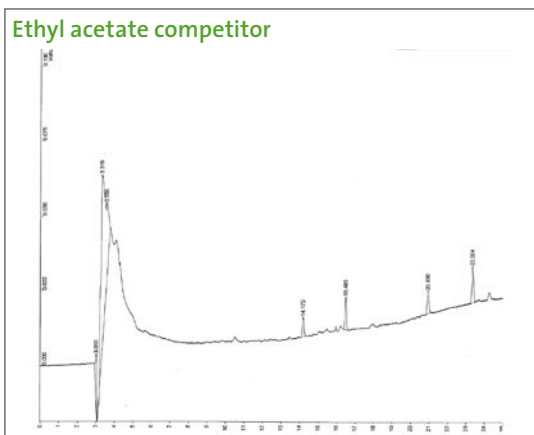
Our GC residue grade solvents are packed under inert conditions to assure optimum performance. Our special self-sealing screw cap fitted with an inner Teflon seal protects the solvent against possible contamination after bottling and during storage.



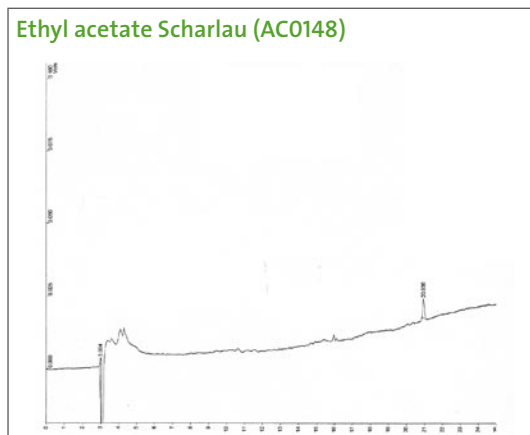
Strict quality control

To guarantee our tight specifications we perform strict GC quality controls. After strong concentration of the solvent, differences in quality are easily revealed. This is showed in the chromatograms below, where Scharlau's ethyl acetate is compared with a competitor's product.

Analysis of ethyl acetate after 500-fold concentration with internal standard. Lindane is used as an internal standard (3 ppt) and it produces a peak at 20,9 minutes.

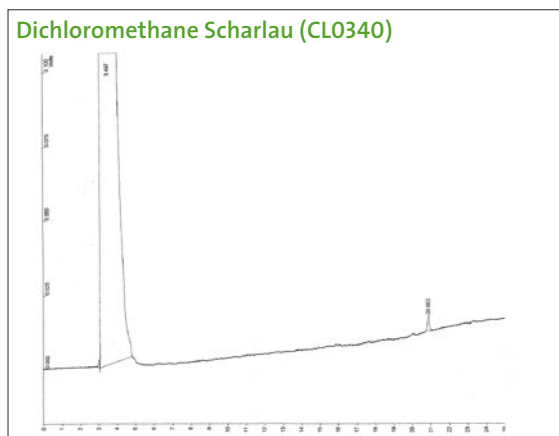
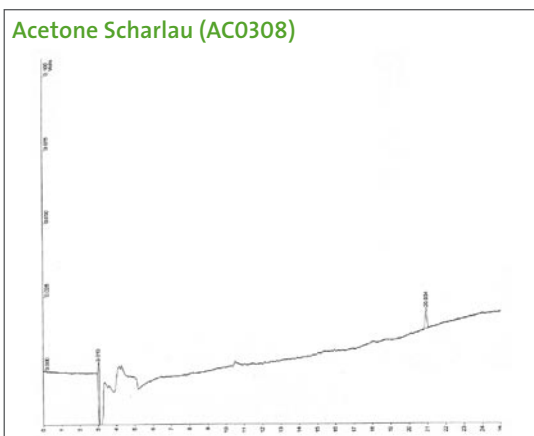


Multiple ECD sensitive impurities are detected

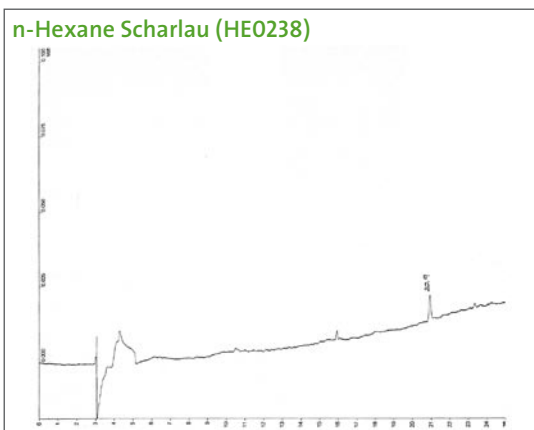


No ECD sensitive impurity is detected

Other typical chromatograms of our GC residue grade solvents:



No ECD sensitive impurities are detected



Analytical conditions:

Column: methyl phenyl cyanopropylsilicone 0,25mm I.D., 25 m, 0,25µm film thickness

Temperature program: 100°C (3 min. hold), 10°C/min – 270°C (5 min. hold)

Injector Temperature: 225°C

Detector temperature: 300°C

Product range

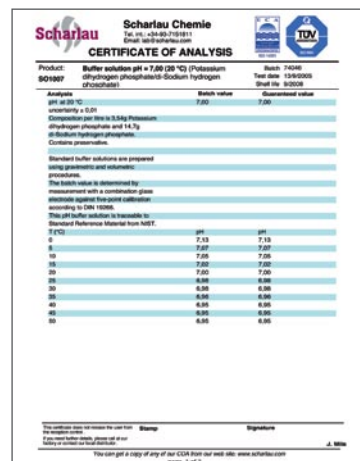
Description	Reference	Purity (%)	Max. evap. residue (%)	Max. water (%)
Acetone	AC0308	99,8	0,0001	0,2
Acetonitrile	AC0338	99,8	0,0001	0,02
Chloroform	CL0208	99	0,0001	0,01
Cyclohexane	CI0035	99,8	0,0001	0,01
Dichloromethane (stab. with ethanol)	CL0340	99,8	0,0001	0,02
Dichloromethane (stab. with amylene)	CL0345	99,9	0,0001	0,02
N,N-Dimethylformamide	DI1068	99,8	0,0001	0,05
Ethyl acetate	AC0148	99,8	0,0001	0,02
n-Hexane	HE0238	96	0,0001	0,01
Methanol	ME0318	99,9	0,0001	0,03
n-Pentane	PE0099	99,5	0,0001	0,01
Petroleum Ether	ET0098	-	0,0001	0,01
2-Propanol	AL0319	99,8	0,0001	0,05
Toluene	TO0081	99,8	0,0001	0,02
Trimethylpentane (iso-Octane)	IS0157	99,8	0,0001	0,01

Other auxiliary products:

Description	Reference
Sodium sulfate anhydrous, GC residue grade	SO0670

Certificate of analysis

All our reagents are supplied with its own certificate of analysis. It includes the real lot analysis as well as expiry date.



Scharlau Chemie
 Tel. +34 93 715 1111
 Email: info@scharlau.com

CERTIFICATE OF ANALYSIS

Product: Buffer solution pH = 7,00 (20 °C) (Potassium dihydrogen phosphate-Sodium hydrogen phosphate)
 Batch: 74360
 Test date: 14/06/08
 Validity: 06/08/08

Acetone	Batch value	Measurement value
pH at 20 °C	7,00	7,00
acidity & SO ₄		
Concentration per litre in 5.5g Potassium dihydrogen phosphate and 14.7g of Sodium hydrogen phosphate.		
Content: guaranteed		

Standard buffer solutions are prepared using gravimetric and volumetric procedures.
 The batch value is determined by measurement with a combination glass electrode against free-point calibration according to DIN 19266.
 This pH buffer solution is traceable to Standard Reference Material from NIST.

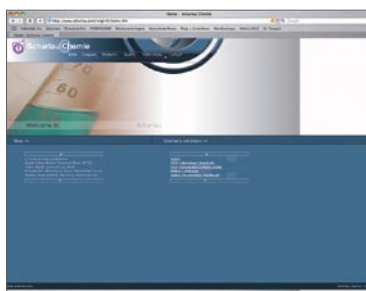
T (°C)	pH	pH
0	7,13	7,13
5	7,07	7,07
10	7,00	7,00
15	7,00	7,00
20	7,00	7,00
25	6,98	6,98
30	6,96	6,96
35	6,95	6,95
40	6,95	6,95
45	6,95	6,95
50	6,95	6,95

This solution does not contain free ions. Storage: Signature: J. Milla

You can get a copy of any of our COA from our web site: www.scharlau.com
 page: 1 of 2

www.scharlau.com

Contact us at our web site whenever you need. You can access our on-line catalogue and get copies of MSDS and certificates of analysis.



CAT-000GC6



Scharlau Chemie S.A.
www.scharlau.com

Scharlab S.L.
www.scharlab.com
export@scharlau.com
 Tel. +34 93 745 64 26
 Fax +34 93 715 27 65