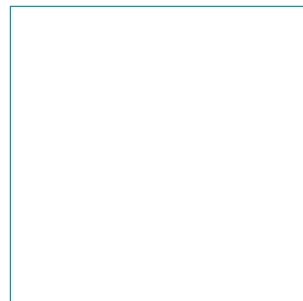
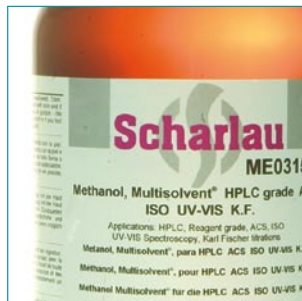
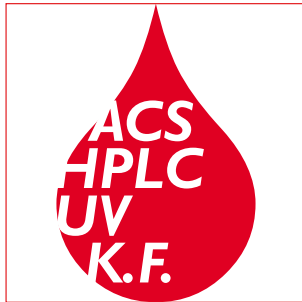
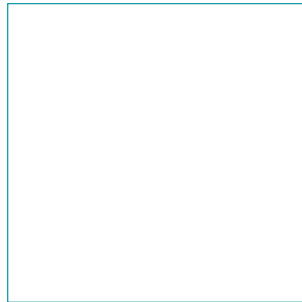


# Scharlau



**MultiSolvent<sup>®</sup>**  
The simplest choice



*Why using too many different qualities of the same solvent?  
You can simplify your work by using MultiSolvent®.  
We guarantee MultiSolvent® for isocratic HPLC, UV spectroscopy,  
Karl Fischer titrations and as ACS reagent grade. Nevertheless, the  
high purity and low water content of MultiSolvent® make it useful  
for almost every application in the laboratory.*

*One solvent. Many applications*

## Single quality

MultiSolvent® from Scharlau is a unique quality. You will have one single product for all your applications, which will save you from keeping in stock many different qualities. Purchase will be simplified. You won't have to keep track of different qualities and different suppliers.

## Preserve the environment

MultiSolvent® is available in one-way glass bottles as well as in stainless steel shuttle packaging. This way, you may help preserve the environment, since packaging will be returned for recycling.



## Highly purified solvent

MultiSolvent® from Scharlau is a highly purified solvent. Multi-step purifications make sure that our new product complies with basically each and every specification of the four qualities it substitutes.

During and after manufacturing, quality control is effected by means of modern analytical techniques like GC, HPLC, ICP, UV spectroscopy and Karl Fischer titrations. All this leads to a solvent of maximum quality, improving the quality of the single application products.



## Competitive price

MultiSolvent® from Scharlau is being offered at a competitive price. Standardising manufacturing processes and manufacturing larger quantities allows us to reduce costs, which we roll over to our customers. You end up paying less for a better product.

## Analysis

We guarantee our MultiSolvent® as “reagent grade” quality. This means, that our products meet specifications of the ACS (American Chemical Society) for “Reagent Chemicals”. In actual fact, our solvents exceed by far these specifications, since the ACS refers itself only to maximum level of impurities which are allowed.

The actual content of each product is proofed by means of an GC chromatogram (FID detector), printed on the label. These guarantees make our MultiSolvent® an ideal solvent for analytical procedures.

## HPLC

Probably the most widely used detector in HPLC is the UV detector. Our MultiSolvent® products are controlled by a UV spectrophotometer, to insure adequate UV transmissions for HPLC purposes. MultiSolvent® is ideal for isocratic HPLC techniques. Don't worry about time consuming microfiltration. Our solvents come free from pump damaging particles.

## UV

MultiSolvent® products are checked with a scanning UV-VIS spectrophotometer.

## Karl Fischer

Although not a “dry” product, its low content of water makes the MultiSolvent® suitable for routine Karl Fischer titrations at a very competitive price.

In the case of methanol, the water content of our MultiSolvent® (typically below 0,03%) is much lower than what is specified by the ACS (max. 0,1% water) for Karl Fischer reagents.

## Column chromatography

This separation technique is routinely used in organic chemistry to purify synthesized molecules. The solvent used to develop the column must be pure enough to assure clean NMR spectra after total evaporation.

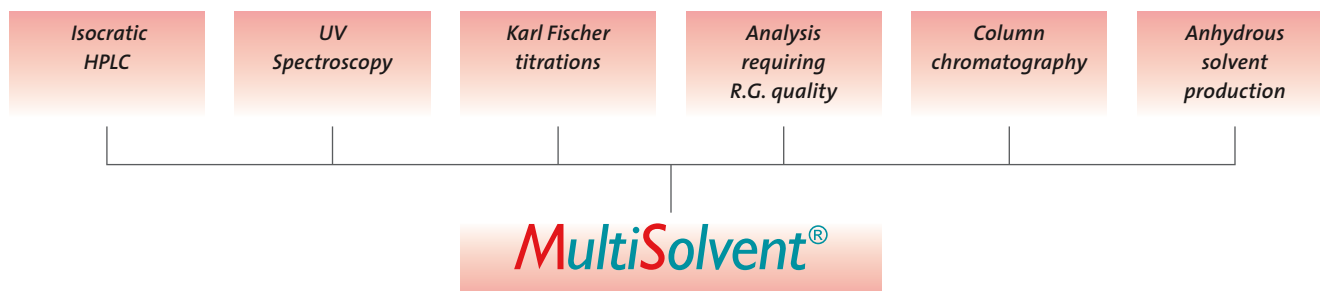
## Anhydrous solvent production

MultiSolvent® has very low water content and is ideal to be used as starting solvent in the production of anhydrous solvents. Either if thermal distillation or pressure column technologies are used to obtain anhydrous solvents, it is important to start from solvents low in water.



**MultiSolvent®**

## MultiSolvent® applications



## Multisolvent® specifications

We guarantee very tight specifications, so that Multisolvent® can be used instead of HPLC, spectroscopy, reagent grade or Karl Fischer qualities. It is easily appreciated, when specifications of Multisolvent® are compared to the rest. Our Multisolvent® quality fulfills all the requirements to be considered a universal solvent.

PRODUCT	ME0302 REAGENT GRADE	ME0310 ISOCRATIC HPLC GRADE	ME0305 UV SPECTROSCOPY GRADE	ME0304 DRY	ME0315 MULTISOLVENT®	TESTED
Assay (G.C.)	min. 99,9%	min. 99,7%	min. 99,9%	min. 99,8%	min. 99,9%	✓
Acidity	max. 0,0002meq/g	max. 0,0002meq/g	max. 0,0003meq/g	max. 0,0002meq/g	max. 0,0002meq/g	✓
Akalinity	max. 0,0002meq/g	max. 0,0002meq/g	max. 0,0002meq/g	max. 0,0002meq/g	max. 0,0002meq/g	✓
Aluminium (Al)	max. 0,00005%			max. 0,00005%	max. 0,00001%	✓
Barium (Ba)	max. 0,00001%			max. 0,00001%	max. 0,000001%	✓
Boron (B)	max. 0,000002%			max. 0,000002%	max. 0,000002%	✓
Cadmium (Cd)	max. 0,000005%			max. 0,000005%	max. 0,000001%	✓
Calcium (Ca)	max. 0,00005%			max. 0,00005%	max. 0,00003%	✓
Zinc (Zn)	max. 0,00001%			max. 0,00001%	max. 0,000001%	✓
Copper (Cu)	max. 0,000002%			max. 0,000002%	max. 0,000002%	✓
Chromium (Cr)	max. 0,000002%			max. 0,000002%	max. 0,000002%	✓
Tin (Sn)	max. 0,00001%			max. 0,00001%	max. 0,00001%	✓
Iron (Fe)	max. 0,00001%			max. 0,00001%	max. 0,000002%	✓
Magnesium (Mg)	max. 0,00001%			max. 0,00001%	max. 0,00001%	✓
Manganese (Mn)	max. 0,000002%			max. 0,000002%	max. 0,000001%	✓
Nickel (Ni)	max. 0,000002%			max. 0,000002%	max. 0,000002%	✓
Lead (Pb)	max. 0,00001%			max. 0,00001%	max. 0,00001%	✓
Ethanol (G.C.)	max. 0,05%			max. 0,1%	max. 0,05%	✓
Aldehydes, ketones (as acetone)	max. 0,001%			max. 0,001%	max. 0,001%	✓
Substances darkened by H <sub>2</sub> SO <sub>4</sub>	PASSES TEST			PASSES TEST	PASSES TEST	✓
Non-volatile matter	max. 0,001%	max. 0,0005%	max. 0,0002%	max. 0,0005%	max. 0,0003%	✓
Water (K.F.)	max. 0,05%	max. 0,05%	max. 0,03%	max. 0,005%	max. 0,03%	✓
Colour (Hazen)	max. 10		max. 10			✓

Minimum transmission in a 1,0 cm cell at wavelength:

	Transmission:		
260 nm		98%	98% ✓
245 nm	90%		
242 nm		90%	90% ✓
232 nm		80%	
220 nm	50%		50% ✓
210 nm	20%		20% ✓
207 nm		10%	10% ✓



### ME0302

Methanol, reagent grade, ACS, ISO

### ME0310

Methanol, isocratic HPLC grade

### ME0305

Methanol, spectroscopy grade Spectrosol®

### ME0304

Methanol, dried (max. 0,005% H<sub>2</sub>O), reagent grade (K.F.)

### ME0315

Methanol, Multisolvent®

## Actual lot analysis on the label


Not only do we guarantee very tight specifications. Our labels carry the actual lot analysis. Every label carries also the signature of our QC chemist, as a personal guarantee for our quality. Avoid having to use a different solvent quality for every application. Avoid having to collect and archive different certificates of guarantee. Our label is our proof of quality and actual lot analysis.

**Highly flammable** Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed. - Keep container tightly closed. Keep away from sources of ignition. - No Smoking. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Fácilmente inflamable** Tóxico por inhalación, por ingestión y en contacto con la piel. Tóxico: peligro de efectos irreversibles muy graves por inhalación, contacto con la piel e ingestión. - Manténgase el recipiente bien cerrado. Conservar alejado de toda flama o fuente de chispas. - No fumar. Usar indumentaria y guantes de protección adecuados. En caso de accidente o malestar, acudir inmediatamente al médico (si es posible, muestre la etiqueta).

**Leichtentzündlich** Giftig beim Einatmen, Verschlucken und Berührung mit der Haut. Giftig: ernste Gefahr irreversiblen Schädens durch Einatmen, Berührung mit der Haut und durch Verschlucken. - Behälter dicht geschlossen halten. Von Zündquellen fernhalten. - Nicht rauchen. Bei der Arbeit geeignete Schutzhandschuhe und Schutzkleidung tragen. Bei Unfälle oder Unwohlsein sofort Arzt zuziehen (wenn möglich das Etikett vorzeigen).

**Facilmente infiammabile** Tossico per inalazione, contatto con la pelle e per ingestione. Tossico: pericolo di effetti irreversibili molto gravi per inalazione, a contatto con la pelle e per ingestione. - Conservare il recipiente ben chiuso. Conservare lontano da fiamme e scintille. - Non fumare. Usare indumenti protettivi e guanti adatti. In caso di incidente o di malessere consultare immediatamente il medico (se possibile, mostrargli l'etichetta).



**ME0315**

**Methanol, Multisolvent® HPLC grade ACS ISO UV-VIS K.F.**

Applications: HPLC, Reagent grade, ACS, ISO UV-VIS Spectroscopy, Karl Fischer titrations

**Metanol, Multisolvent®, para HPLC ACS ISO UV-VIS K.F.**

**Méthanol, Multisolvent®, pour HPLC ACS ISO UV-VIS K.F.**

**Methanol Multisolvent® für die HPLC ACS ISO UV-VIS K.F.**

**Alcole metilico, Multisolvent®, per HPLC ACS ISO UV-VIS K.F.**


CH<sub>3</sub>OH • M= 32,04 • D=0,79 g/cm<sup>3</sup>

assay (G.C.)	99.98 %	vanadium (V)	0.000002 %
identity (IR-spectrum)	passes test	zinc (Zn)	0.000001 %
density (20/4°)	0.792	zirconium (Zr)	0.000005 %
appearance	clear	acetone (G.C.)	0.001 %
colour (Hazen)	4	ethanol (G.C.)	0.01 %
solubility in water	passes test	aldehydes, ketones (as acetone)	0.001 %
acidity	0.0002 meq/g	acetaldehyde	0.001 %
alkalinity	0.0005 meq/g	formaldehyde	0.001 %
chlorides (Cl)	0.001 %	carbonil compounds (as CO)	0.001 %
sulfates (SO <sub>4</sub> )	0.00001 %	substances darkened by H <sub>2</sub> SO <sub>4</sub>	passes test
aluminium (Al)	0.000002 %	KMnO <sub>4</sub> red matter (as O)	0.00025 %
arsenic (As)	0.000002 %	non-volatile matter	0.0002 %
barium (Ba)	0.000001 %	water (K.F.)	0.025 %
beryllium (Be)	0.000002 %	liquid chromatography suitability	passes test
bismuth (Bi)	0.000001 %	absorbance gradient elution	passes test
boron (B)	0.000005 %	transmission/absorbance in a 1.0 cm cell at wavelength	T (%) A (AU)
cadmium (Cd)	0.000001 %	207 nm	38 0.444 AU
chromium (Cr)	0.000001 %	220 nm	69 0.167 AU
cobalt (Co)	0.000002 %	232 nm	85 0.071 AU
copper (Cu)	0.000002 %	242 nm	94 0.042 AU
gallium (Ga)	0.000002 %	260 nm	98 0.009 AU
gold (Au)	0.000002 %		
indium (In)	0.000002 %		
iron (Fe)	0.000001 %		
lead (Pb)	0.000001 %		
lithium (Li)	0.000005 %		
magnesium (Mg)	0.000001 %		
nickel (Ni)	0.000001 %		
manganese (Mn)	0.000001 %		
molybdenum (Mo)	0.000002 %		
nicker (Ni)	0.000001 %		
platinum (Pt)	0.000002 %		
silver (Ag)	0.000002 %		
thallium (Tl)	0.000001 %		
tin (Sn)	0.000001 %		
titanium (Ti)	0.000002 %		


R: 11-232/425-3923/2425 UN 1230

S: 7-16-3923/45

CE: 693-001-00-X • ENEC/Nb: 200-669-6 • CAS-Nb: [67-58-1] • WDK: 1 • ADR/RID: 3 FT 1 • IMDG Code: 3 • IATA/ICAO: 3 • Swiss Poison Class: 3 • ADR/land: 3-1



Highly flammable  
Fácilmente inflamable  
Leichtentzündlich  
Facilmente infiammabile



Toxic  
Tóxico  
Giftig  
Tossico

Product conform to specifications. G. C. Manager: Scharlau Chemie S.A. Gato Perez, 33 Pol. Ind. Mas d'en Cita 08181 Sentmenat, SPAIN Tel. 34 937151811 Made in the European Union CE Lab. Equip. CE Class Reports CE. EN14683

RECEIVED  
OPENED  
OPENED BY:

Multisolvent® from Scharlau is labelled following E.U. regulations

## ISO 9001: 2000

### Quality procedures


Like all other Scharlau reagents, our Multisolvent® line of solvents is being manufactured following ISO 9001: 2000 quality procedures. This certification simplifies your quality acceptance and helps you, to achieve your own quality assurance goals.

## ISO 14001: 2004

### Environmental care

Scharlau Chemie got ISO 14001 approval in 2002 and all manufacturing processes are designed to minimize environmental impacts.

CERTIFICAT • CERTIFICATE • CERTIFICADO • CERTIFICAT • CERTIFICATE • CERTIFICADO • CERTIFICAT • CERTIFICATE • CERTIFICADO • CERTIFICAT • CERTIFICATE • CERTIFICADO



Management Service

## CERTIFICATE

The Certification Body  
of TÜV Management Service, S.L.  
certifies that

**Scharlau Chemie S.A.**  
Ctra. De Polinya a Sentmenat, Km. 8.2  
E - 08181 Sentmenat-Barcelona


has established and applies a  
Quality and Environmental Management System  
for the following scope of application:


**Design and manufacturing of laboratory chemicals and culture media  
for microbiology**

Performance of audits (Report-No. 575)  
has furnished proof that the requirements under:


**ISO 9001: 2000  
ISO 14001: 2004**

are fulfilled. This certificate is valid until 08-02-2009  
Certificate Registration No. 05 100/200 10294 TMS





Barcelona, 09-02-2008



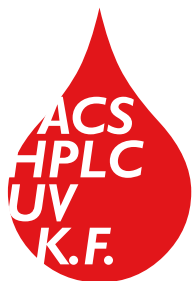
TUV Management Service, S.L. Grupo TÜV SÜD Gran Via Carlos III, 84 edif. 2º 08038 Barcelona - España

Tel. +34 93 745 64 26

Fax +34 93 715 27 65

## Multisolvent® tips

- It will cost you less
- It will reduce the stock of your solvents
- It will simplify your election
- It will guarantee your results
- It will avoid errors in your laboratory
- It will increase your safety
- You can also purchase it in shuttle packaging



# MultiSolvent®

Shuttle packaging is available only in some countries. Ask your distributor!

CAT-00MS06

## Ordering information

### AC0310

Acetone, Multisolvent®		
AC03101000	1 l	●
AC03102500	2,5 l	●
AC03104000	4 l	●
AC0310007E	7 l	●
AC0310025S	25 l	■

### AC0333

Acetonitrile, Multisolvent®		
AC03331000	1 l	●
AC03332500	2,5 l	●
AC03334000	4 l	●
AC0333007E	7 l	●
AC0333025S	25 l	■

### BE0041

Benzene, Multisolvent®		
BE00411000	1 l	●
BE00412500	2,5 l	●
BE00414000	4 l	●
BE0041007E	7 l	●
BE0041025S	25 l	■

### CL0218

Chloroform, Multisolvent®, stabilized with etanol		
CL02181000	1 l	●
CL02182500	2,5 l	●

### CI0039

Cyclohexane, Multisolvent®		
CI00391000	1 l	●
CI00392500	2,5 l	●
CI00394000	4 l	●
CI0039007E	7 l	●

### CL0347

Dichloromethane, Multisolvent®, stabilized with approx. 50 ppm of amylene		
CL03471000	1 l	●
CL03472500	2,5 l	●
CL03474000	4 l	●
CL0347007E	7 l	●

### DI1072

N,N-Dimethylformamide, Multisolvent®		
DI10721000	1 l	●
DI10722500	2,5 l	●
DI10724000	4 l	●
DI1072007E	7 l	●
DI1072025S	25 l	■

### ET0015

Ethanol absolute, Multisolvent®		
ET00151000	1 l	●
ET00152500	2,5 l	●
ET00154000	4 l	●
ET0015007E	7 l	●
ET0015025S	25 l	■

### ET0013

Ethanol approx. 96%, Multisolvent®		
ET00131000	1 l	●
ET00132500	2,5 l	●
ET00134000	4 l	●
ET0013007E	7 l	●
ET0013025S	25 l	■

### AC0155

Ethyl acetate 96% Multisolvent®		
AC01551000	1 l	●
AC01552500	2,5 l	●
AC01554000	4 l	●
AC0155007E	7 l	●
AC0155025S	25 l	■

### HE0221

Hexane, fraction from petroleum, Multisolvent®		
HE02211000	1 l	●
HE02212500	2,5 l	●
HE02214000	4 l	●
HE0221007E	7 l	●
HE0221025S	25 l	■

### HE0234

n-Hexane, 96%, Multisolvent®		
HE02341000	1 l	●
HE02342500	2,5 l	●
HE02344000	4 l	●
HE0234007E	7 l	●
HE0234025S	25 l	■

### IS0122

Isohexane, Multisolvent®		
IS01221000	1 l	●
IS01222500	2,5 l	●

### ME0315

Methanol, Multisolvent®		
ME03151000	1 l	●
ME03152500	2,5 l	●
ME03154000	4 l	●
ME0315007E	7 l	●
ME0315025S	25 l	■

### ET0095

Petroleum ether, Multisolvent®, boiling range 40-60°C		
ET00951000	1 l	●
ET00952500	2,5 l	●
ET00954000	4 l	●
ET0095007E	7 l	●
ET0095025S	25 l	■

### AL0321

2-Propanol, Multisolvent®		
AL03211000	1 l	●
AL03212500	2,5 l	●
AL03214000	4 l	●
AL0321007E	7 l	●
AL0321025S	25 l	■

### TE0127

Tetrachloroethene, Multisolvent®		
TE01271000	1 l	●

### TE0228

Tetrahydrofuran, Multisolvent®, GPC grade, stabilized with 250 ppm of 2,6-Di-tert-butyl- 4-methylphenol (BHT)		
TE02281000	1 l	●
TE02282500	2,5 l	●
TE02284000	4 l	●
TE0228007E	7 l	●
TE0228025S	25 l	■

### TO0085

Toluene, Multisolvent®		
TO00851000	1 l	●
TO00852500	2,5 l	●
TO00854000	4 l	●
TO0085007E	7 l	●
TO0085025S	25 l	■

### XI0059

Xylene, mixture of isomers, Multisolvent®		
XI00591000	1 l	●
XI00592500	2,5 l	●
XI0059007E	7 l	●
XI0059025S	25 l	■