

NEW PRODUCTS

High purity solvents in chemsolute® quality

Acetonitrile ultragradient grade for HPLC		C2H3N	Min. 99.9 %			
For laboratory use			Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 75-05-8	UN Nr. 1648		2685.2500	2,5l	2,5 l	175,00 G
EINECS Nr. 200-835-2	3, II			2,5l	4 x 2,5 l	140,00
R 11-20/21/22-36	S 16-36/37					
M = 41.05 g/mol		Density = 0.786 g/ml				
Refractive index (20°C) min. 1.342 max. 1.346 Water content (KF) max. 100 mg/kg Non volatile residue max. 2 mg/kg Free acids (as CH3COOH) max. 20 mg/kg HPLC gradient (peak) at 254 nm: <= 0.5 mAU UV transmittance at 197 nm: >= 85% UV transmittance at 200 nm: >= 92%		UV transmittance at 210 nm: >= 95 % UV transmittance at 220 nm: >= 98 % Fluorescence (quinine) at 254 nm: max. 1 ppb Gradient baseline drift at 210 nm max. 12 mAU UV Cut off max. 190 nm Filtered through 0.2 micron				
Acetonitrile for LC-MS		C2H3N	Min. 99.95 %			
For laboratory use			Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 75-05-8	UN Nr. 1648		2697.1000	1l	1 l	87,50 G
EINECS Nr. 200-835-2	3, II			1l	6 x 1 l	70,00
R 11-20/21/22-36	S 16-36/37		2697.2500	2,5l	2,5 l	212,50 G
				2,5l	4 x 2,5 l	170,00
M = 41.05 g/mol		Density = 0.786 g/ml				
Refractive index (20°C) min. 1.342 max. 1.346 Water content (KF) max. 100 mg/kg Non volatile residue max. 2 mg/kg Free acids max. 0.0005 meq/g UV transmittance at 195 nm: >= 80% UV transmittance at 200 nm: >= 95% UV transmittance at 220 nm: >= 98% UV transmittance at >= 230 nm: >= 99 % HPLC gradient (peak) at 210 nm: <= 1 mAU HPLC gradient (peak) at 254 nm: <= 0.2 mAU		Fluorescence (quinine) at 254 nm: max. 1 ppb Fluorescence (quinine) at 365 nm: max. 0.5 ppb Aluminium (Al) max. 0.000005% Iron (Fe) max. 0.000005% Sodium (Na) max. 0.000005% Calcium (Ca) max. 0.000005% Magnesium (Mg) max. 0.000005% Potassium (K) max. 0.000005% Sensitive Impurities (reserpine) max. 100 ppb Filtered through 0.1 micron				
Ethyl acetate for HPLC		CH3COOC2H5	Min. 99.8%			
For laboratory use			Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 141-78-6	UN Nr. 1173		2237.2500	2,5l	2,5 l	62,50 G
EINECS Nr. 205-500-4	3, II			2,5l	4 x 2,5 l	50,00
R 11-36-66-67	S 16-26-33					
M = 88.10 g/mol		Density = 0.90 g/ml				
Refractive index (20°C) min. 1.370 max. 1.374 Water content (KF) max. 200 mg/kg Non volatile residue max. 10 mg/kg Free acids (as CH3COOH) max. 30 mg/kg UV transmittance at 270 nm: >= 90%		UV transmittance at 300 nm: >= 95% Ethanol max. 0.04% Methanol max. 0.01% Filtered through 0.2 micron				

Ethyl acetate for LC-MS

CH₃COOC₂H₅

Min. 99.95 %

For laboratory use

		Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 141-78-6	UN Nr. 1173	2278.1000	1l	1 l	43,75 G
EINECS Nr. 205-500-4	3, II		1l	6 x 1 l	35,00
R 11-36-66-67	S 16-26-33				

M = 88.10 g/mol

Density = 0.90 g/ml

Refractive index (20°C) min. 1.370 max. 1.374
 Water content (KF) max. 200 mg/kg
 Non volatile residue max. 2 mg/kg
 Free acids (as CH₃COOH) max. 0.003%
 UV transmittance at 260 nm: >= 75%
 UV transmittance at 275 nm: >= 97%
 UV transmittance at 300 nm: >= 98%

Aluminium (Al) max. 0.000005%
 Iron (Fe) max. 0.000005%
 Sodium (Na) max. 0.000005%
 Magnesium (Mg) max. 0.000005%
 Calcium (Ca) max. 0.000005%
 Potassium (K) max. 0.000005%
 Filtered through 0.2 micron

Methanol for LC-MS

CH₃OH

Min. 99.95 %

For laboratory use

		Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 67-56-1	UN Nr. 1230	1428.1000	1l	1 l	21,90 G
EINECS Nr. 200-659-6	3, (6.1), II		1l	6 x 1 l	17,50
R 11-23/24/25-39/23/24/25	S 7-16-36/37-45	1428.2500	2,5l	2,5 l	36,00 G
			2,5l	4 x 2,5 l	28,80

M = 32.04 g/mol

Density = 0.7914 g/ml

Refractive index (20°C) min. 1.327 max. 1.331
 Water content (KF) max. 200 mg/kg
 Non volatile residue max. 2 mg/kg
 Free acids max. 0.0003 meq/g
 UV transmittance at 210 nm: >= 30%
 UV transmittance at 225 nm: >= 65%
 UV transmittance at 235 nm: >= 85%
 UV transmittance at >= 260 nm: >= 98 %
 Fluorescence (quinine) at 254 nm: <= 1 ppb
 Fluorescence (quinine) at 365 nm: <= 1 ppb

HPLC gradient (peak) at 235 nm: <= 2 mAU
 HPLC gradient at (peak) 254 nm: <= 1 mAU
 Aluminium (Al) max. 0.000005%
 Iron (Fe) max. 0.000005%
 Sodium (Na) max. 0.000005%
 Calcium (Ca) max. 0.000005%
 Magnesium (Mg) max. 0.000005%
 Potassium (K) max. 0.000005%
 Sensitive Impurities (reserpine) max. 100 ppb
 Filtered through 0.2 micron

2-Propanol for LC-MS

CH₃CH(OH)CH₃

Min. 99.95%

For laboratory use

		Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 67-63-0	UN Nr. 1219	1178.1000	1l	1 l	31,00 G
EINECS Nr. 200-661-7	3, II		1l	6 x 1 l	24,80
R 11-36-67	S 7-16-24/25-26				

M = 60.10 g/mol

Density = 0.78 g/ml

Refractive index (20°C) min. 1.375 max. 1.379
 Water content (KF) max. 200 mg/kg
 Non volatile residue max. 2 mg/kg
 Free acids (as CH₃COOH) max. 0.0010%
 UV transmittance at 220 nm: >= 64%
 UV transmittance at 230 nm: >= 80%
 UV transmittance at 260 nm: >= 98.5%
 HPLC gradient (peak) at 254 nm: <= 2 mAU

Aluminium (Al) max. 0.000005%
 Iron (Fe) max. 0.000005%
 Sodium (Na) max. 0.000005%
 Calcium (Ca) max. 0.000005%
 Magnesium (Mg) max. 0.000005%
 Potassium (K) max. 0.000005%
 Sensitive Impurities (reserpine) max. 100 ppb
 Filtered through 0.2 micron

Water for LC-MS

H₂O

For laboratory use

		Article No.	Unit	Volume	Price EUR/Unit
CAS Nr. 7732-18-5		455.1000	1l	1 l	13,00 G
EINECS Nr. 231-791-2			1l	6 x 1 l	10,40
		455.2500	2,5l	2,5 l	22,50 G
			2,5l	4 x 2,5 l	18,00

M = 18.02 g/mol

Density = 1.00 g/ml

HPLC gradient test passed
 HPLC gradient (peak) at 210 nm <= 5 mAU
 HPLC gradient (peak) at 254 nm <= 1 mAU
 Non volatile residue max. 1 mg/kg
 Aluminium (Al) max. 0.000005%
 Iron (Fe) max. 0.000005%
 Calcium (Ca) max. 0.000005%

Magnesium (Mg) max. 0.000005%
 Sodium (Na) max. 0.00001%
 Potassium (K) max. 0.000005%
 Sensitive Impurities (reserpine) max. 100 ppb
 Conductivity max. 0.1 mS/cm
 Filtered through 0.2 micron

Specifications

	Acetonitrile for LC-MS	Ethyl acetate for LC-MS	Methanol for LC-MS	2-Propanol for LC-MS	Water for LC-MS
Catalogue No. / Pack sizes	GE/2697.1000 for 1l GE/2697.2500 for 2,5l	GE/2278.1000 for 1l	GE/1428.1000 for 1l GE/1428.2500 for 2,5l	GE/1178.1000 for 1l	GE/455.1000 for 1l GE/455.2500 for 2,5l
Assay (min)	99,95%	99,95%	99,95%	99,95%	-
Refractive index (20°C) (min-max)	1.342-1.346	1.370-1.374	1.327-1.331	1.375-1.379	-
Free acids (CH ₃ COOH) (max)	0.0005%	0.0030%	0.0003%	0.0010%	-
Free alkali (NH ₃) (max)	0.00020%	0.00050%	0.00006%	0.00050%	-
Conductivity (max)	-	-	-	-	0.1 mS/cm
Total Organic Carbon (TOC) (max)	-	-	-	-	100 ppb
Fluorescence (quinine) bei 254 nm (max)	1 ppb	-	1 ppb	-	-
Fluorescence (quinine) bei 365 nm (max)	0.5 ppb	-	1 ppb	-	-
Non volatile residue (max)	0.0002%	0.0002%	0.0002%	0.0002%	0.0001%
Water content (Karl Fischer) (max)	0.01%	0.02%	0.02%	0.02%	-
UV Transmittance at 195 nm (min)	80%	-	-	-	-
UV Transmittance at 200 nm (min)	95%	-	-	-	-
UV Transmittance at 210 nm (min)	-	-	30%	-	-
UV Transmittance at 220 nm (min)	98%	-	-	64%	-
UV Transmittance at 225 nm (min)	-	-	65%	-	-
UV Transmittance at 230 nm (min)	99%	-	-	80%	-
UV Transmittance at 235 nm (min)	-	-	85%	-	-
UV Transmittance at 260 nm (min)	-	75%	98%	98.5%	-
UV Transmittance at 275 nm (min)	-	97%	-	-	-
UV Transmittance at 300 nm (min)	-	98%	-	-	-
HPLC gradient (peak) bei 210 nm (max)	1 mAU	-	-	-	5 mAU
HPLC gradient (peak) bei 235 nm (max)	-	-	2 mAU	-	-
HPLC gradient (peak) bei 254 nm (max)	0.2 mAU	-	1 mAU	2 mAU	1 mAU
Aluminium (Al) (max)	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb
Calcium (Ca) (max)	50 ppn	50 ppb	50 ppb	50 ppb	50 ppb
Iron (Fe) (max)	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb
Potassium (K) (max)	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb
Magnesium (Mg) (max)	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb
Sodium (Na) (max)	50 ppb	50 ppb	50 ppb	50 ppb	100 ppb
Sensitive Impurities (reserpine) (max)	100 ppb	-	100 ppb	100 ppb%	100 ppb

chemsolute® - focus on essentials

The plus factors of chemsolute® LC-MS solvents:

- + Minimized background noise through highly purified solvents
- + Very low level of metal ions
- + Highest purity for better life time of columns

High purity LC-MS solvents for analytical methods detecting compounds at extremely low levels.

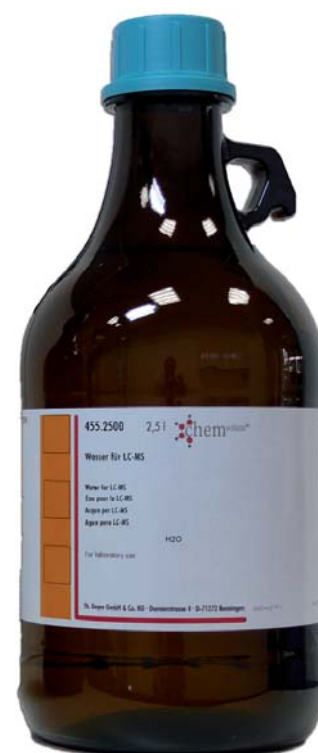
No selling to private persons!

General terms and conditions of export sale and delivery of Th. Geyer apply.

Do you already know our new website?

Please have a look to: www.thgeyer.de

Many informations and even more services are waiting for you.



Return fax to be sent to our offices

Adress

Department

Person in charge

Street

Postal code / Town

Area Code / Telephone

Area Code / Fax

E-Mail

Date / Signature

Order

Article No.	Description	Unit	Volume	Quantity	Price EUR/Unit	Total EUR
2685.2500	Acetonitrile ultragradient grade for HPLC	2,5l	2,5l		175,00	
		2,5l	4 x 2,5l		140,00	
2697.1000	Acetonitrile for LC-MS	1l	1l		87,50	
		1l	6 x 1l		70,00	
2697.2500	Acetonitrile for LC-MS	2,5l	2,5l		212,50	
		2,5l	4 x 2,5l		170,00	
2237.2500	Ethyl acetate for die HPLC	2,5l	2,5l		62,50	
		2,5l	4 x 2,5l		50,00	
2278.1000	Ethyl acetate for LC-MS	1l	1l		43,75	
		1l	6 x 1l		35,00	
1428.1000	Methanol for LC-MS	1l	1l		21,90	
		1l	6 x 1l		17,50	
1428.2500	Methanol for LC-MS	2,5l	2,5l		36,50	
		2,5l	4 x 2,5l		28,80	
1178.1000	2-Propanol for LC-MS	1l	1l		31,00	
		1l	6 x 1l		24,80	
455.1000	Water for LC-MS	1l	1l		13,00	
		1l	6 x 1l		10,40	
455.2500	Water for LC-MS	2,5l	2,5l		22,50	
		2,5l	4 x 2,5l		18,00	

Our offices:

Th. Geyer GmbH & Co. KG	Dornierstrasse 4 · D-71272 Renningen	Tel. +49 7159 1637-0	Fax +49 7159 18417	E-Mail renningen@thgeyer.de
Th. Geyer GmbH & Co. KG - V.-Büro West	Kirchstrasse 1 · D-53797 Lohmar	Tel. +49 2246 10098-0	Fax +49 2246 10098-29	E-Mail lohmar@thgeyer.de
Th. Geyer Hamburg GmbH & Co. KG	Oehleckerring 14 · D-22419 Hamburg	Tel. +49 40 533214-0	Fax +49 40 5321004	E-Mail hamburg@thgeyer.de
Th. Geyer Berlin GmbH	Dillenburg Strasse 53 · D-14199 Berlin	Tel. +49 30 3911001	Fax +49 30 3932069	E-Mail berlin@thgeyer.de
Th. Geyer Danmark ApS	Læderstræde 5B, 1. · DK-4000 Roskilde	Tel. +45 4630 0030	Fax +45 4630 0069	E-Mail sales@thgeyer.dk

Internet: www.thgeyer.de