



Solvents for LC-MS

Nowadays, the LC-MS technique is being used by an increasing number of analytical and research laboratories in several areas of industry (environmental, pharmaceutical and biotechnology laboratories).

Due to its high sensitivity and selectivity, the LC-MS is the suitable technique for the identification and quantification of a large number of compounds in the most complex matrix.

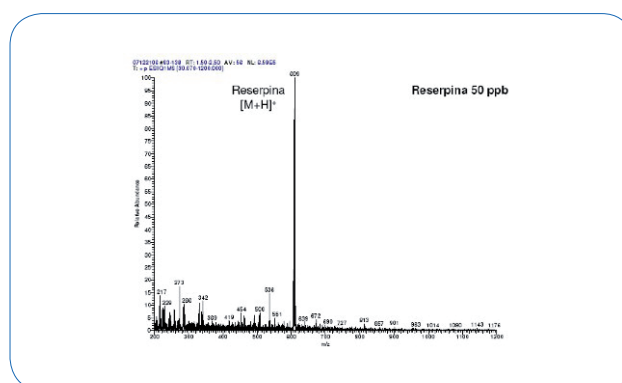
Panreac AppliChem offers within its HPLC product line, the range of LC-MS solvents that meet the requirements of this modern technique:

Very low concentration (<100 ppb) of metals (such as sodium and potassium) that could form clusters and, therefore, difficult the correct determination of the molecular ion.

Microfiltered through 0.2 µm pore size filter, assuring a low content of particles.

Suitability for LC-MS: No signals higher than the molecular peak of the reserpine (609 amu) at a concentration of 50 ppb, in a range from 200 to 2000 amu.

High UV transmittance and an **excellent baseline** in gradient elution for HPLC.



Solvents for LC-MS

Code	Description	Packaging
701881.1611	Acetonitrile	1000 mL
701881.1612	Acetonitrile	2.5 L
701881.0537*	Acetonitrile	30 L
701091.1611	Methanol	1000 mL
701091.1612	Methanol	2.5 L
701074.1611	Water	1000 mL
701074.1612	Water	2.5 L

*Stainless steel drum, subject to special selling conditions

Specifications:

	Acetonitrile (LC-MS)	Methanol (LC-MS)	Water (LC-MS)
Code	701881	701091	701074
Identity	IR p/t	IR p/t	
Density at 20/4	0.779-0.783	0.791-0.792	
APHA Colour	≤ 10	≤ 10	
Minimum assay (G.C.)	≥ 99.9%	≥ 99.9%	
Non-volatile matter	≤ 0.0001%	≤ 0.0002%	≤ 0.0001%
Acidity	≤ 0.0003 meq/g	≤ 0.0002 meq/g	
Alkalinity	≤ 0.0001 meq/g	≤ 0.0002 meq/g	
Water	≤ 0.01%	≤ 0.02%	
Chloride (Cl)			≤ 0.000001%
Fluoride (F)			≤ 0.000001%
Nitrate (NO ₃)			≤ 0.00001%
Sulfate (SO ₄)			≤ 0.00001%
Base line drift (210 nm)	10 mUA		
Base line drift (235 nm)		15 mUA	
Gradient			
A (mAU)			
at 210 nm	≤ 1		≤ 5
at 235 nm		≤ 2	
at 254 nm	≤ 0,2	≤ 1	≤ 0.5
UV Transmittance (1cm cell; ref.: water)			
at 190 nm	≥ 30 %		
at 193 nm	≥ 60 %		
at 195 nm	≥ 80 %		
at 200 nm	≥ 90 %		≥ 98 %
at 205 nm (cut off)		≥ 10 %	
at 210 nm		≥ 30 %	≥ 98 %
at 220 nm		≥ 60 %	
at 230-400 nm	≥ 98 %		
at 230 nm		≥ 80 %	
at 240 nm		≥ 90 %	
at 254 nm			≥ 99 %
at 260-400 nm		≥ 98 %	
at 300-450 nm			≥ 99 %
Fluorescence			
Reference: Quinine			
a 254 nm	≤ 1 ppb	≤ 1 ppb	≤ 1 ppb
a 365 nm	≤ 0.5 ppb	≤ 0.5 ppb	≤ 0.5 ppb
Suitability for LC-MS			
TIC 200-2000 m/z ESI (+). Reference: 100 ppb reserpine			
Sensitive impurities	≤ 100 ppb	≤ 200 ppb	≤ 200 ppb
Metals			
Silver (Ag)	0.05 ppm	0.05 ppm	0.1 ppm
Aluminium (Al)	0.5 ppm	0.5 ppm	0.5 ppm
Barium (Ba)	0.1 ppm	0.1 ppm	0.1 ppm
Calcium (Ca)	0.05 ppm	0.1 ppm	0.1 ppm
Cadmium (Cd)	0.05 ppm	0.05 ppm	0.05 ppm
Cobalt (Co)	0.02 ppm	0.02 ppm	0.02 ppm
Chromium (Cr)	0.02 ppm	0.02 ppm	0.02 ppm
Copper (Cu)	0.02 ppm	0.01 ppm	0.02 ppm
Iron (Fe)	0.1 ppm	0.1 ppm	0.1 ppm
Potassium (K)	0.1 ppm	0.1 ppm	0.1 ppm
Magnesium (Mg)	0.1 ppm	0.1 ppm	0.1 ppm
Manganese (Mn)	0.02 ppm	0.01 ppm	0.02 ppm
Sodium (Na)	0.1 ppm	0.1 ppm	0.1 ppm
Nickel (Ni)	0.02 ppm	0.02 ppm	0.02 ppm
Lead (Pb)	0.1 ppm	0.02 ppm	0.1 ppm
Tin (Sn)	0.1 ppm	0.1 ppm	0.1 ppm
Zinc (Zn)	0.1 ppm	0.1 ppm	0.1 ppm

Microfiltered product (0.2 µm) and bottled under nitrogen atmosphere

IP-005

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