

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.

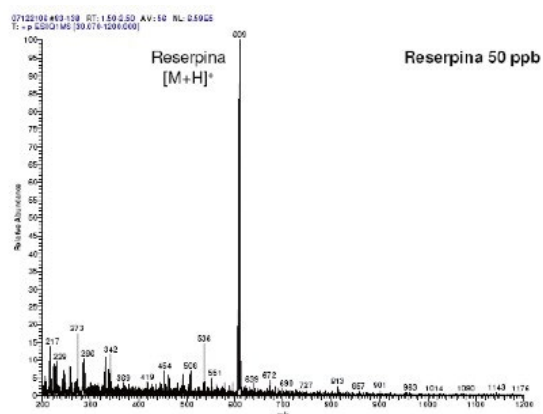
PanReac AppliChem offers within its HPLC product line, the range of LC-MS solvents that meet the requirements of this modern technique:

Very low metal concentration (<100 ppb).

Low particle content due to microfiltration (0.2 µm pore size filter).

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.



Product code	Product name	CAS number	Pack sizes
701881.1611	Acetonitrile for LC-MS	75-05-8	1 L
701881.1612			2.5 L
701091.1611	Methanol for LC-MS	67-56-1	1 L
701091.1612			2.5 L
701074.1611	Water for LC-MS	7732-18-5	1 L
701074.1612			2.5 L



	Acetonitrile (LC-MS)	Methanol (LC-MS)	Water (LC-MS)
Product 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 mAU		
Base line drift (235 nm)		15 mAU	
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			
at 254 nm	≤ 1 ppb	≤ 1 ppb	≤ 1 ppb
at 365 nm	≤ 0.5 ppb	≤ 0.5 ppb	≤ 0.5 ppb
Suitability for LC-MS			
TIC 200-2000 m/z ESI (+). Reference: 50 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-005EN

