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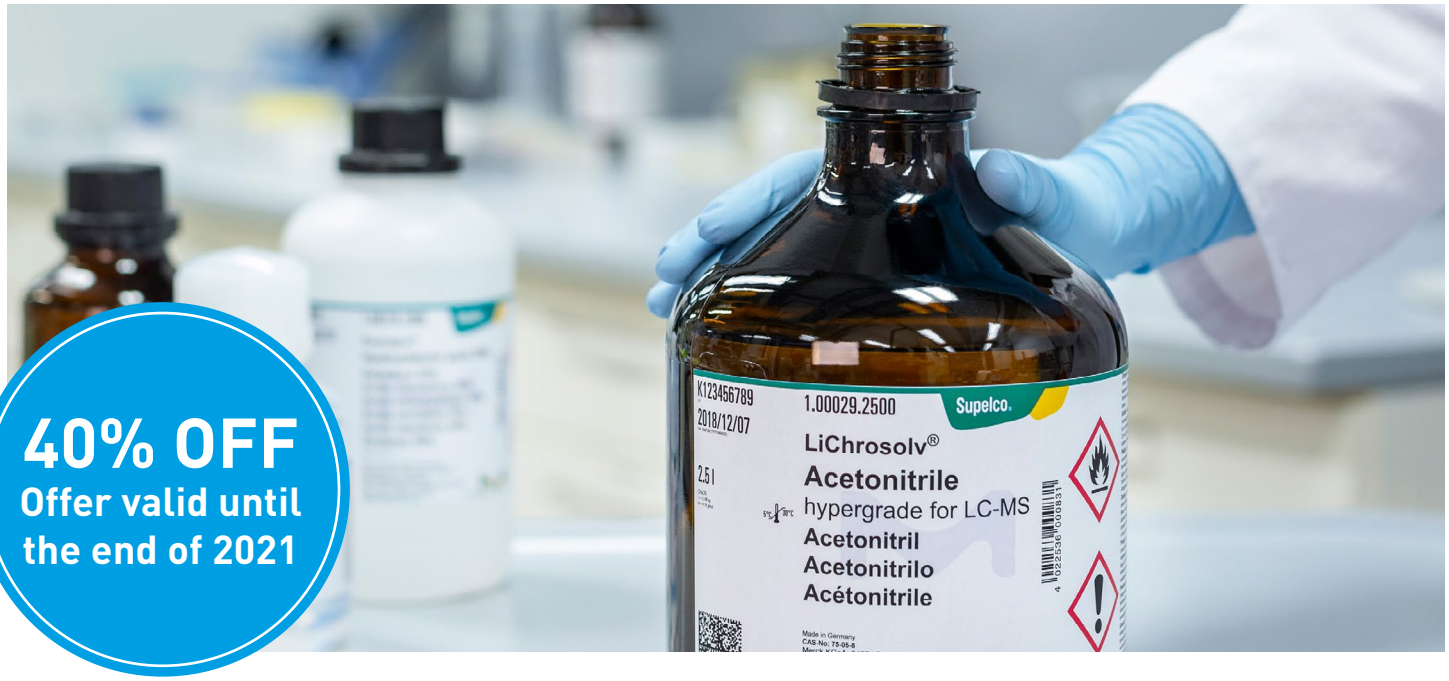
40% off Supelco® LC-MS & UHPLC-MS LiChrosolv® Solvents from Merck

MERCK

Supelco®
Analytical Products

In celebration of our appointment as an official distributor for the Merck – Supelco® Range of Analytical Products



40% OFF
Offer valid until the end of 2021

Product	Description	Code	Pack	List Price	Offer Price
Acetonitrile	Hypergrade for LC-MS LiChrosolv	1000291000	1L	£129.00	£77.40
		1000292500	2.5L	£267.00	£160.20
		1000294000	4L	£323.00	£193.80
		1000299010	10L	£853.00	£511.80
		1000299030	30L	£1,850.00	£1,110.00
		1000299185	185L	£8,900.00	£5,340.00
Acetonitrile + 0.1% Formic acid (v/v)	Hypergrade for LC-MS LiChrosolv	1590021000	1L	£78.30	£46.98
		1590022500	2.5L	£155.00	£93.00
		1590024000	4L	£258.00	£154.80
Acetonitrile + 0.1% Acetic acid (v/v)	Hypergrade for LC-MS LiChrosolv	1590042500	2.5L	£156.00	£93.60
		1590044000	4L	£257.00	£154.20
Acetonitrile + 0.1% Trifluoroacetic acid (v/v)	Hypergrade for LC-MS LiChrosolv	1590142500	2.5L	£156.00	£93.60
		1590144000	4L	£232.00	£139.20
Acetonitrile with 0.05% Trifluoroacetic acid (v/v)	LiChrosolv	4806722500	2.5L	£346.00	£207.60
Dimethylformamide	For Liquid Chromatography LiChrosolv	5438971000	1L	£95.60	£57.36
		5438972500	2.5L	£183.00	£109.80
Ethyl Acetate	Hypergrade for LC-MS LiChrosolv	1036491000	1L	£40.50	£24.30
		1036492500	2.5L	£84.70	£50.82

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Product	Description	Code	Pack	List Price	Offer Price
Heptane	Hypergrade for LC-MS LiChrosolv	1036541000	1L	£94.90	£56.94
		1036542500	2.5L	£211.00	£126.60
Hexane	Hypergrade for LC-MS LiChrosolv	1037011000	1L	£74.80	£44.88
		1037012500	2.5L	£181.00	£108.60
		1037014000	4L	£209.00	£125.40
Methanol	Hypergrade for LC-MS LiChrosolv	1060351000	1L	£43.60	£26.16
		1060352500	2.5L	£90.70	£54.42
		1060354000	4L	£118.00	£70.80
		1060359185	185L	£3,050.00	£1,830.00
Methanol:Water 30:70 (v/v)	LiChrosolv	4805089030	30L	£997.00	£598.20
1-Methyl-2-pyrrolidone	For Liquid Chromatography LiChrosolv	5438991000	1L	£98.60	£59.16
		5438992500	2.5L	£217.00	£130.20
2-Propanol	Hypergrade for LC-MS LiChrosolv	1027811000	1L	£35.40	£21.24
		1027812500	2.5L	£71.40	£42.84
		1027814000	4L	£106.00	£63.60
Water	Hypergrade for LC-MS LiChrosolv	1153331000	1L	£19.80	£11.88
		1153332500	2.5L	£40.90	£24.54
		1153334000	4L	£73.40	£44.04
		1153339010	10L	£211.00	£126.60
		1153339030	30L	£294.00	£176.40
		1153339185	185L	£1,560.00	£936.00
Water + 0.1% Acetic acid (v/v)	Hypergrade for LC-MS LiChrosolv	1590072500	2.5L	£49.50	£29.70
Water + 0.1% Formic acid (v/v)	Hypergrade for LC-MS LiChrosolv	1590132500	2.5L	£42.60	£25.56
		1590134000	4L	£125.00	£75.00
Water + 0.1% Trifluoroacetic acid (v/v)	Hypergrade for LC-MS LiChrosolv	4801122500	2.5L	£54.90	£32.94
		4801124000	4L	£88.80	£53.28
		4801129030	30L	£400.00	£240.00

Product	Description	Code	Pack	List Price	Offer Price
Acetonitrile	For UHPLC-MS LiChrosolv	1037251002	1L	£356.00	£213.60
		1037252002	2L	£553.00	£331.80
Methanol	For UHPLC-MS LiChrosolv	1037261002	1L	£129.00	£77.40
		1037262002	2L	£206.00	£123.60
Water	For UHPLC-MS LiChrosolv	1037281002	1L	£91.50	£54.90
		1037282002	2L	£140.00	£84.00

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LC-MS: Raising the bar on purity

Liquid chromatography - mass spectrometry (LC-MS) is fast becoming a routine fixture in today's well-equipped analytical laboratory. Along with the increased use of LC-MS comes instrumental, chemical and database methods aimed at increasing the sensitivity, specificity and speed of analysis of this invaluable technique. New ion sources, high-resolution LC systems and rapid mass spectrometers with enhanced ion optics and detectors have lowered the limits of detection, but have raised the bar on the purity expectations of reagents used for sample preparation, mobile phases, and as additives. Some notable examples of how the purity and composition of the chemicals used in LC-MS that affect the analysis include:

- Polymers—including biopolymers such as proteins and DNA—form adducts with inorganic salts, leading to complex mass spectra and a broad distribution of multiply-charged sodium, potassium and chloride adducts.
- Salts can suppress ionization in ESI sources, even with small molecules.
- Reagents, solvents and devices used in sample preparation along with additives always present a risk of contamination.

Some particular compound classes that can be problematic are alkali ions, plasticizers and surfactants, as they are widespread and interfere strongly with LC-MS by forming adducts and causing higher background noise as well as leading to signal suppression. Because of the integral part that chemistry plays in a successful LC-MS analysis, we have developed and introduced a broad portfolio solvents, additives and reagents which are designed specifically to meet the requirements of high purity and consistency. This brochure contains a compilation of articles on LC-MS additives and the advantages of high purity solvents for both small and large molecule analysis.

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Solvents and Blends for LC-MS

Superior resolution and sensitivity

Why use LC-MS grade solvents?

- No ghost peaks
- Full reproducibility
- Extends the lifetime of your columns
- Optimized and tested for LC-MS applications
- Minimal background ion suppression
- Global availability

Why Pre-Blended?

- Reduces the risk of contamination
- Saves time
- No cleaning of glassware or filtration
- Less exposure to hazardous chemicals

As LC-MS is a highly sensitive analytical technique, impurities in your solvents can have an impact on the accuracy and reproducibility of your analytical results. Have confidence in your analysis by using our high purity solvents and blends designed to meet the demanding requirements of LC-MS applications, ensuring baseline stability, lowest impurity levels and, in addition, high UV transmittance.

Developed specifically for LC-MS, we have introduced a range of high purity solvents pre-blended with acetic acid, formic acid or trifluoroacetic acid, to provide convenient ready-to-use mobile phases for accurate LC-MS.

This complete product portfolio sets the standard for accurate, reproducible and high-resolution analytical separations for superior performance and sensitivity.

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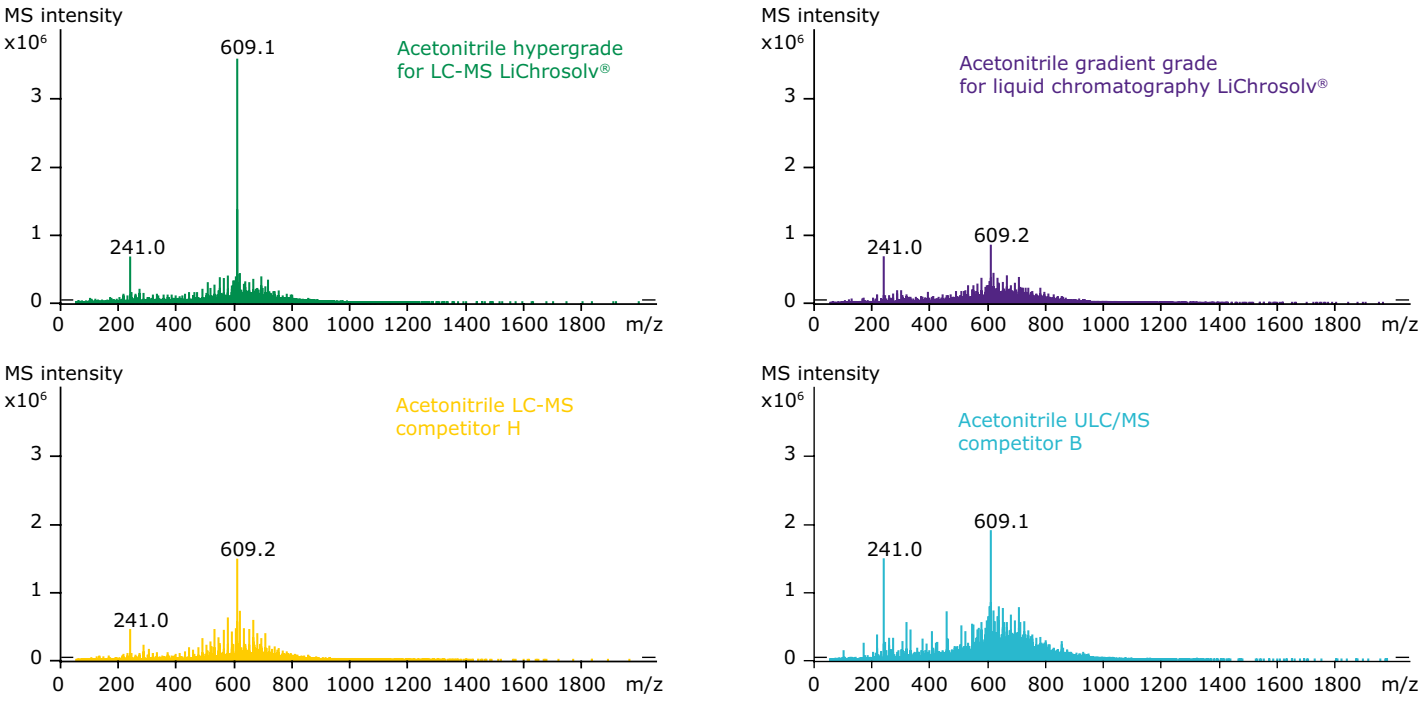
Why your choice of solvent matters



MS conditions	
System	Bruker Esquire 3000+ ion trap MS
Detection	Pos. ESI-MS, m/z range 50 – 2000
Flow rate	0.2 mL/min via syringe pump
Temperature	25 °C
Sample	Reserpine (m/z 609.1), internal standard (m/z 241.0)

Mass spectra displaying the results of reserpine comparing different acetonitrile qualities from Merck and two alternative competitors.

The mass spectra of these four different acetonitrile grades clearly shows the variation in the intensity of the reserpine signal ([M+H]+ = 609), as well as the extent of the background signals. The differences in the intensity of the reserpine signal are caused by ion suppression. This effect occurs due to interfering trace contaminants that can be present in acetonitrile, which can be avoided using the correct high grade solvent for this purpose.

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High-purity UHPLC-MS LiChrosolv® solvents for rapid and reliable results.

Discover how our new range of advanced UHPLC-MS LiChosolv® solvents raise the standard for low baseline noise and clean mass spectra.

The new range of advanced UHPLC-MS solvents have been developed to exceed all expectations, providing rapid and reliable results in both ESI/APCI positive and negative ionization modes.

Thanks to their lowest level of background noise and ion suppression, this quality ensures the optimum ionization efficiency to enable the highest sensitivity. With these features, use of these solvents can also help to extend column lifetime.

To ensure that you have confidence in your results, we specify the lowest possible limit of polyethylene glycol (PEG) impurities in all our UHPLC-MS solvents.

Our advanced UHPLC-MS LiChrosolv® solvents have been designed to meet the highest requirements of UHPLC-MS in research and quality control, including proteomics and metabolomics as well as environmental, clinical, food or industrial testing applications.

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