



- Complete SS316 Plant
- Sterile Environment
- LC-MS - Grade Water
- HPLC- Grade Water
- ICP-MS - Grade Water
- IC - Grade Water
- Pyrogen Free water
- Reagent Water





## LC-MS GRADE WATER:

LC/MS solvents are optimized to provide low particulates, polyethylene glycol, phthalates and amides, and extremely low levels of metal ions and non-volatile residue. Products are tested for LC/MS suitability, ESI+, UV-Vis absorbance, trace metals, residue after evaporation, and assay. Interference-free baselines ensure users can have the highest confidence in solvent performance in their applications.

## LC-MS Water Quality analysis:

- LC-MS and LC-UV trace metals analysis
- HPLC / UV-VIS quality control
- Low gradient baseline drift
- Low levels of trace metals
- No non-volatile impurities
- Lot -to-lot consistency

## LC- MS WATER SPECIFICATION:

LC/MS Suitability	Complies	Cadmium (Cd)	Max. 0.05 ppm	Sulfate (SO <sub>4</sub> )	Max. 0.1 ppm
Aluminium	Max. 0.5 ppm	Cobalt (Co)	Max. 0.02 ppm	HPLC Gradient at 210 nm	Max. 5 mAU
Calcium	Max. 0.1 ppm	Chromium (Cr)	Max. 0.02 ppm	HPLC Gradient at 254 nm	Max. 1 mAU
Iron	Max. 0.1 ppm	Copper (Cu)	Max. 0.02 ppm	Fluorescence (chinin) at 254 nm	Max. 1 ppb
Magnesium	Max. 0.1 ppm	Manganese (Mn)	Max. 0.02 ppm	Fluorescence (chinin) at 365 nm	Max. 1 ppb
nickel	Max. 0.02 ppm	Lead (Pb)	Max. 0.02 ppm	Absorbance at 210 nm	Max. 0.022
Pottasium	Max. 0.1 ppm	Tin (Sn)	Max. 0.1 ppm	Absorbance at 230 nm	Max. 0.004
Sodium	Max. 0.1 ppm	Zinc (Zn)	Max. 0.1 ppm	Transmittance at 210 nm	Min. 95 %
Silver (Ag)	Max. 0.1 ppm	Fluoride (F)	Max. 0.1 ppm	Transmittance at 230 nm	Min. 99 %
Barium (Ba)	Max. 0.1 ppm	Nitrate (NO <sub>3</sub> )	Max. 0.01 ppm	Refractive Index	n <sub>20/D</sub> 1.34(lit.)



Water is a very simple molecule, but that simple combination allows the emergence of exceptional properties that have made water the most important solvent on earth and an essential support to the Analytical Laboratories.

Every laboratory has need for Purified Water. Purified Water has a very wide range of uses in chemical, Microbial, and biochemical laboratories. From glassware washing to autoclave filling, it is essential to have a good quality purified water.

What is lab grade water?

This typically refers to reagent grade water (RGW) which is water that has been sufficiently processed and filtered to allow its use in a scientific procedure so that it will not interfere with accuracy or precision associated with the procedure.

Water may be treated by several methods. Distillation is a well-known and reliable method but is slow and may produce inconsistent water quality. Filtration methods, including reverse osmosis (RO) are probably the most common method in use. Deionization (DI) is the only method that will produce the high resistivity required for Type I water.

For sophisticated laboratory applications, a combination of methods is usually utilized, beginning with some pre-treatment such as water softening followed by reverse osmosis filtration, UV treatment and deionization for higher grades.

Water is an excellent solvent for salts because these are made of negatively and positively charged ions that will be surrounded by the dipolar water molecules. As water is the universal solvent and used in nearly all laboratory applications, it must be free of impurities to help ensure that you obtain consistent results with your experiments.

Water plays various roles in industrial, educational, medical, and research laboratories depending upon properties such as water purity, sterility, etc.,

Products can be used in chemical analysis, as solvents, as reactants, in sample preparation, etc.

High-purity solvents and reagents give you the performance you need - minimizing the risk of contaminants that can limit accuracy while maximizing instrument sensitivity and detection power in key applications: UHPLC and LC/MS analysis - LC/ MS water is ideal for cutting-edge applications, such as proteomics, pharmacokinetics, clinical research and drug discovery, while Our LC/MS is tested and optimized for minimal impurities and interference-free baselines, giving you performance you can trust. HPLC analysis you can improve your processes, obtain high selectivity, reproducibility, and accuracy of results. Low UV absorbance, residue after evaporation and low water levels will create a flat base line and extend column life in demanding liquid chromatography analysis.

At Riki Global, we work closely with laboratory testing team and clients to understand specific needs which enables us to design appropriate water treatment systems and distribution. high-purity solvents will give you the performance you need with minimal risk of contaminants, while maximizing the sensitivity and detecting power of your instrumentation.

Please call us with your questions about high purity laboratory water systems. Pure and ultrapure water makes a difference in the quality and consistency of your results.



## HPLC GRADE WATER:

HPLC solvents are manufactured using multi-step purification processes that produce reliable, low backgrounds free of extraneous peaks. Products are tested for assay, water, residue after evaporation, and UV absorbance and fluorescence in critical ranges.

## HPLC WATER QUALITY ANALYSIS:

- Tested for HPLC-suitability via gradient analysis and UV-VIS spectroscopy
- Low UV impurity profile
- Low impurity gradient LC baseline
- UV transparency for optimum sensitivity
- Lot -to-lot consistency
- Innovative packaging options to assure solvent quality to the point-of-use

## HPLC GRADE WATER SPECIFICATION:

Color	<0.5 APHA
Absorbance at 200nm	<0.01 AU
Absorbance at 254nm	<0.005 AU
Absorbance at 300nm	<0.005 AU
Absorbance at 400nm	<0.005 AU
Refractive Index (n <sub>25</sub> /D)	<1.334
Residue after Evaporation	<1 ppm

## DM GRADE WATER/ REAGENT GRADE WATER:

- Laboratory use
- Feed water for autoclaves, climatic chambers and humidifiers
- Filling water baths and cooling circuits
- Rinsing components
- Battery water
- Medical applications

