

# Certificate of Analysis

**Water, HPLC Grade**  
**ACS Reagent Grade, Suitable for Liquid Chromatography**

**Lot Number:** 2204C12

**Product Number:** 9153

**Date Packaged:** APR 09, 2022

**Expiration Date:** SEP 2023

This product is manufactured by a continuous process that has been validated to produce high purity Water meeting, as a minimum, the specifications below. The analysis results are from the most recent scheduled monitoring.

### Contains

H<sub>2</sub>O CAS No. 7732-18-5 MW 18.02

Test	Specification	Result
Chloride (Cl)	max 0.4 ppm	0.00017 ppm
Conductivity at 25°C	max 0.056	0.055 µS/cm
Heavy Metals (as Pb)	max 0.01 ppm	< 0.01 ppm
LC Suitability (Absorbance)	To Pass Test	Passed
LC Suitability (Gradient Elution Test)	To Pass Test	Passed
Nitrate (NO <sub>3</sub> )	max 0.4 ppm	< 0.00002 ppm
Organic Carbon (TOC)	max 50 ppb	27 ppb
Oxidizable Substances (Permanganate Retention)	To Pass Test	Passed
Phosphate (PO <sub>4</sub> )	max 1.0 ppm	< 0.00002 ppm
Silicate (as SiO <sub>2</sub> )	max 0.01 ppm	< 0.0005 ppm
Sulfate (SO <sub>4</sub> )	max 1.0 ppm	< 0.00005 ppm

Specification	Reference
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Water, Reagent, Suitable for Ultraviolet Spectrophotometry and  
 Liquid Chromatography

ACS (N/A)

This water is specially purified by conventional water softening, prefiltration, activated carbon organic adsorption, reverse osmosis, mixed bed triple deionization, ultraviolet light irradiation, and 0.2 micron membrane filtration. Consult RICCA CHEMICAL COMPANY Technical Reference Document TRD02 (for lot numbers starting with 1) or TRD03 (for lot numbers starting with 2) for details of the water purification process.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
9153-32	1 L amber glass	18 months

**Recommended Storage:** 15°C - 30°C (59°F - 86°F)



Myrlande Gilles (04/09/2022)

Quality Control

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.