

# Certificate of Analysis

**Water, ACS Reagent Grade, ASTM Type I, ASTM Type II**  
**Packaged in plastic containers**

**Lot Number:** 1202948

**Product Number:** 9150

**Date Packaged:** FEB 17, 2022

**Expiration Date:** AUG 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 at the time of packaging. This water also meets ASTM Type III and Type IV specifications. The analysis results are from the most recent scheduled monitoring.

This product is not certified to meet USP and EP Purified Water specifications. The RICCA CHEMICAL COMPANY catalog number for USP / EP Purified Water is 9190.

## Contains

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

Test	Specification	Result
Appearance	Colorless liquid	Passed
Chloride (Cl)	max 1 ppb	0.04 ppb
Conductivity at 25°C	max 0.056	0.056 µS/cm
Heavy Metals (as Pb)	max 0.01 ppm	< 0.01 ppm
Nitrate (NO <sub>3</sub> )	max 0.4 ppm	0.00002 ppm
Organic Carbon (TOC)	max 50 ppb	12 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 3 ppb	< 1 ppb
Sodium (Na)	max 1 ppb	< 0.01 ppb
Sulfate (SO <sub>4</sub> )	max 1.0 ppm	< 0.00005 ppm

Specification	Reference
Reagent Water	ACS (N/A)
Reagent Water, Type I	ASTM (D 1193)
Reagent Water, Type II	ASTM (D 1193)
Reagent Water, Type III	ASTM (D 1193)
Reagent Water, Type IV	ASTM (D 1193)

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)
9150-5	20 L Cubitainer®	18 months

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

A handwritten signature in black ink, appearing to read 'Jason Thomas', is displayed on a light gray rectangular background.

Jason Thomas (02/17/2022)

Operations Manager

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.