

Certificate of Analysis

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

Lot Number: 1111A24

Product Number: 9151

Date Packaged: DEC 07, 2021

Expiration Date: MAY 2023

Packaged in glass for applications requiring extremely low levels of organics. 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. Although this water is not distilled, it has a chemical purity equal to or better than double distilled water. The analysis results are from the most recent scheduled monitoring. This product also meets ASTM Type III and Type IV specifications.

Contains

H₂O 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 ₃)	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 ₄)	max 1.0 ppm	< 0.00002 ppm
Silicate (as SiO ₂)	max 3 ppb	< 1 ppb
Sodium (Na)	max 1 ppb	< 0.01 ppb
Sulfate (SO ₄)	max 1.0 ppm	< 0.00005 ppm

Specification	Reference
ASTM Type II Water	EPA (SW-846) (7197)
ASTM Type II Water	EPA (SW-846) (7195)
Deionized, distilled water (ASTM Type II)	EPA (200.7)
Reagent Water	ACS (N/A)
Reagent Water	EPA (SW-846) (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)
9151-1	4 L amber glass	18 months

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



Israel Alamudun (12/07/2021)

Quality Control Supervisor

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

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