

# Certificate of Analysis

## Potassium Hydroxide, 45% (w/w), Analytical Reagent Grade

**Lot Number:** 4405B95

**Product Number:** 6190

**Manufacture Date:** MAY 01, 2024

**Expiration Date:** DEC 2026

This solution has purity equivalent to that obtained by dissolving ACS Reagent Grade Potassium Hydroxide in high purity water.

Name	CAS#	Grade
Water	7732-18-5	Reagent
Potassium Hydroxide	1310-58-3	Reagent

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	Passed	
Assay (vs. Sulfuric Acid/Phenolphthalein)	min 45.0 % (w/w)	46.1 % (w/w)	723
Chloride (Cl)	max 0.003 %	0.002 %	
Heavy Metals (as Ag)	max 5 ppm	< 1 ppm	
Iron (Fe)	max 2 ppm	0.04 ppm	3126
NH <sub>4</sub> OH Precipitate	max 0.005 %	0.002 %	
Nickel (Ni)	max 5 ppm	< 0.1 ppm	3136
Nitrogen Compounds (as N)	max 5 ppm	0.4 ppm	
Phosphate (PO <sub>4</sub> )	max 2 ppm	< 1 ppm	
Potassium Carbonate (K <sub>2</sub> CO <sub>3</sub> )	max 0.2 %	0.02 %	
Sodium (Na)	max 0.02 %	0.01 %	3152
Sulfate (SO <sub>4</sub> )	max 0.001 %	0.00005 %	

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
6190-16	500 mL natural poly	36 months

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



Paul Brandon (05/01/2024)  
Production Manager

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