

Product Specification

Sodium Hydroxide, 50% (w/w) (760 g/L), Analytical Reagent Grade

Lot Number: SAMPLE

Product Number: 7291

Manufacture Date: N/A

Expiration Date: N/A

The specifications below are equivalent to the ACS Reagent Grade specifications for Sodium Hydroxide pellets, corrected for assay.
There is no ACS specification for 50% (w/w) Sodium Hydroxide solution.

Name	CAS#	Grade
Water	7732-18-5	Reagent
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result	NIST SRM#
Appearance	Colorless liquid	N/A	
Assay (vs. Sulfuric Acid/Phenolphthalein)	50-52 % (w/w)	N/A	723
Chloride (Cl)	max 0.002 %	N/A	
Heavy Metals (as Ag)	max 0.001 %	N/A	
Iron (Fe)	max 5 ppm	N/A	3126
NH ₄ OH Precipitate	max 0.01 %	N/A	
Nickel (Ni)	max 5 ppm	N/A	3136
Nitrogen Compounds (as N)	max 5 ppm	N/A	
Phosphate (PO ₄)	max 5 ppm	N/A	
Potassium (K)	max 0.01 %	N/A	3141
Sodium Carbonate (Na ₂ CO ₃)	max 0.1 %	N/A	
Sulfate (SO ₄)	max 0.001 %	N/A	

Specification	Reference
Sodium Hydroxide Solution, 50%	ASTM (D 2187 E)
Sodium Hydroxide Solution, 50%	ASTM (D 2187 F)
Sodium hydroxide stock solution, about 50%	TAPPI (T 235 cm-85)
Sodium Hydroxide Solution	ASTM (D 2187 G)
Sodium Hydroxide Solution, 50%	ASTM (D 4548)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 A)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 B)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 C)
Sodium Hydroxide Solution (50% w/w)	ASTM (D 2036 D)

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 ϵ 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)
7291-2.5	10 L Cubitainer®	36 months
7291-32	1 L natural poly	36 months
7291-5HP	20 L Ropak™	36 months
7291-5	20 L Cubitainer®	36 months

7291-30	30 gal drum	36 months
7291-1	4 L natural poly	36 months
7291-16	500 mL natural poly	36 months
7291-55	55 gal drum	36 months

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

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