

# Sodium Hydroxide (NaOH)

Product	Con.	Cat#	Size
Sodium Hydroxide (NaOH)	10N	IBS-BS017	1 L
	5N	IBS-BS017a	1 L
	1N	IBS-BS017b	1 L
	0.1N	IBS-BS030	1 L

**Components :** 10N (5N, 1N, 0.1N) Sodium Hydroxide solution

**Storage Conditions :** Room Temperature

Storage of solutions at RT will allow their use for up to 1 year.

**Introduction :** Sodium hydroxide, also known as lye or caustic soda, has the molecular formula NaOH and is a highly caustic metallic base. It is a white solid available in pellets, flakes, granules, and as a 50% saturated solution. Sodium hydroxide is soluble in water, ethanol and methanol. This alkali is deliquescent and readily absorbs moisture and carbon dioxide in air.

Sodium hydroxide is used in many industries, mostly as a strong chemical base in the manufacture of pulp and paper, textiles, drinking water, soaps and detergents and as a drain cleaner. Worldwide production in 2004 was approximately 60 million tonnes, while demand was 51 million tonnes. Although molten sodium hydroxide possesses properties similar to those of the other forms, its high temperature comparatively limits its applications.

**Use :** Sodium hydroxide is the principal strong base used in the chemical industry. In bulk it is most often handled as an aqueous solution, since solutions are cheaper and easier to handle. Sodium hydroxide, a strong base, is responsible for most of these applications. Another strong base such as potassium hydroxide is likely to yield positive results as well. 56% of sodium hydroxide produced is used by the chemical industry, with 25% of the same total used by the paper industry. Sodium hydroxide is also used for the manufacture of sodium salts and detergents, for pH regulation, and for organic synthesis. It is used in the Bayer process of aluminium production.