

Technical Data Sheet

Caustic Soda (Pearl)

Chemical Formula	:	NaOH
Molecular Weight	:	40 ^g / _{mol}
EC No.	:	215-185-5
CAS No.	:	1310-73-2

General information:

Caustic soda pearls, also known as sodium hydroxide (NaOH), are white spheres of caustic soda with a barely perceptible odor. They are soluble in water, releasing heat during the dissolution process, and remain stable under normal conditions 1. These small, crystalline pearls are highly hygroscopic and odorless. Caustic soda is used:

Textile Industry:

Used for mercerization and impurity removal in fabric preparation.

Soap and Detergent Manufacturing:

Essential for saponification and pH adjustment.

Pulp and Paper Production:

Involved in pulping processes.

Metallurgy:

Used to extract alumina from bauxite.

Various Manufacturing Processes:

Employed as a reagent, pH regulator, catalyst, cleaning agent, and chemical intermediate

Specification:

Appearance	Solid, white crystalline pearls	
рН	12.5 - 13 (1% solution)	
Melting point	318.4 °C	
Freezing point	<10 °C	
Boiling point	1390 °C	
Flash point	Not applicable	
Density	1.15 kg/dm ³ at 25 °C	

Expiration date:

Caustic soda pearls have a shelf life of up to 3 years from the date of manufacture when stored under recommended condition



Technical Data Sheet

Transportation and Storage:

Caustic soda pearls are typically stored and transported in 25 kg woven bags with a PE liner. They fall under packing group II and are classified as hazard class 8 due to their corrosive nature. Ensure that the packaging is sturdy, with a thickness of more than 0.5 mm and compression resistance exceeding 0.5 Pa. All packaging must be clearly labeled with the "Corrosive" symbol. During transportation, keep the containers tightly closed and secure.

Store caustic soda pearls in a cool, well-ventilated area.

Containers should be made of materials that can withstand their corrosive effects (e.g., steel drums). Avoid exposure to moisture and humidity.

Follow safety precautions and wear appropriate protective gear when handling or accessing the storage area.

Important:

For a better suitability of the product for your particular purpose, tests are recommended prior product use. You are advised to make your own determination as to safety, appropriate manner of handling, storage, use and disposal. All the information contained in this product technical sheet is offered for your consideration, investigation and verification. The data is presented in good faith and is believed to be reliable. You should not consider the descriptions, information, data or design as a part of our terms and conditions of sale. We expressly disclaim responsibility or liability for any loss, damage or expense arising out of reliance on the information provided herein.