

MILES® CAUSTIC SODA 50% LIQUID

Sodium Hydroxide Solution / Lye

Product Data Sheet

PRODUCT DESCRIPTION

Miles® Caustic Soda 50% Liquid is a concentrated, clear, colorless and odorless solution of sodium hydroxide in water. It is a very strong base used for pH control and neutralization, chemical processing, cleaning and degreasing, water treatment, and pulp, paper and textile processing.

It is highly corrosive to skin, eyes and many metals. Because its freezing point is around 7–12°C, it can crystallize in cold weather, so store it in a heated or temperature-controlled area.

Chemical Name: Sodium hydroxide solution (50%)

CAS Number: 1310-73-2

Chemical Formula: NaOH (50 wt% in water)

Molecular Weight: 40.00 g/mol (NaOH)

TYPICAL APPLICATIONS

Miles® Caustic Soda 50% Liquid is suitable for use in applications including:

- pH control and neutralization
- Chemical processing
- Cleaning and degreasing
- Water treatment
- Pulp, paper and textile processing

TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Appearance	Clear, colorless liquid; odorless
Concentration (As NaOH)	49.0–51.5 wt%
Relative Density	1.49–1.53 g/cm ³ at 20°C
Freezing Point	7–12°C (45–54°F)
Boiling Range	138–143°C (280–289°F)
pH	14 or higher
Viscosity	approx. 40 cP at 30°C
Impurities (Membrane Grade, Maximum)	Sodium chloride 100 ppm; sodium sulfate 100 ppm; iron 3 ppm
Water Solubility	Miscible
Transport	UN1824, Class 8 (corrosive), Packing Group II

The values shown are typical physical properties and are not intended to constitute product specifications.

PRODUCT FEATURES

- Concentrated 50% solution for efficient dosing
- Strong alkalinity (pH 14 or higher)
- Fully miscible with water
- Freezing point of 7–12°C, so plan heated storage in cold climates

STORAGE & HANDLING

Store in tightly closed containers made of compatible, corrosion-resistant materials. Because the freezing point is about 7–12°C, store in a heated or temperature-controlled area to prevent crystallization. Keep away from acids. Never store in aluminum containers, and avoid magnesium, zinc, tin and chromium; stainless steel is the industry standard.

Corrosive (UN1824, Class 8, Packing Group II). Causes severe skin burns and eye damage and is corrosive to many metals. Consult the applicable Miles® Safety Data Sheet (SDS)

before handling, storing, or using this product.

AVAILABLE PACKAGING

- 680-Pound Drums

Packaging availability may vary. Contact Miles Lubricants LLC for current packaging and minimum-order requirements.

IMPORTANT

Miles® Caustic Soda 50% Liquid is intended for industrial applications. It should not be represented or used as USP, pharmaceutical, food, cosmetic, or personal-care grade unless the specific product supplied is independently certified for those applications.

PRODUCT INFORMATION

Miles Lubricants LLC

Industrial Lubricants, Chemicals & Specialty Fluids

Product: Miles® Caustic Soda 50% Liquid (680 lb Drum)

CAS No.: 1310-73-2

For product availability, technical information, and Safety Data Sheets, contact Miles Lubricants LLC.

DISCLAIMER

The information and typical properties contained in this Product Data Sheet are provided for general informational purposes and are believed to be accurate at the time of publication. Typical values are not specifications or guaranteed properties. Product users are responsible for determining the suitability, compatibility, safety, and regulatory compliance of the product for their particular application. Please consult the applicable Safety Data Sheet before use.