# Caustic Soda Flakes SAFETY DATA SHEET



Chemical Formula : NaOH Cas No. :1310-73-2

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

SHANGHAI CHEMDO TRADING CO., LTD	
CHEMDO GROUP COMPANY LIMITED	
ADD.	ROOM 611, BUILDING 1, NO 159 RENQI ROAD, FENGXIAN, SHANGHAI, CHINA, 201499
EMERGENCY TEL	0086-21-37521510
SYNONYMS	Caustic Soda
PRODUCT USE	Used for chemicals producing and analysis.

SECTION 2: CHEMICAL IDENTIFICATION	
English name of chemical	Caustic soda
Trade name of chemical	Sodium Hydroxide (Caustic Soda)
Molecular formula	Na OH
molecular weight	40

SECTION 3: COMPOSITION INFORMATION	
Harmful substances	Content
Sodium hydroxide	≥ 99.5%

SECTION 4: HAZARD OVERVIEW	
Risk category	8.2 Alkaline corrosion.
Invasion route	Inhalation, ingestion, skin contact.
Health hazards	This product is strongly irritating and corrosive. Dust or smoke irritates eyes and respiratory tract and corrodes nasal septum; Direct contact with skin and eyes may cause burns; Misuse may cause burns of digestive tract, mucosal erosion Bleeding and shock.
Environmental hazards	Can cause pollution to water bodies.
Explosion hazard	This product is incombustible, highly corrosive and irritating, and can cause burns to the human body.

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SECTION 5: FIRST AID MEASURES	
Skin contact	Take off contaminated clothes immediately and wash with water for at least 15 minutes. In case of burns, seek medical treatment.
Eye contact	Immediately lift the eyelids and wash them with flowing water or normal saline for at least 15 minutes. Or use 3% boric acid solution flushing. If necessary, go to the company's infirmary for further treatment.
Inhalation	Leave the site quickly to a fresh air place, and go to the company's infirmary for further treatment if necessary.
Ingestion	Rinse the mouth immediately when the patient is awake, take diluted vinegar or lemon juice orally, and go to the company clinic if necessary. Make further treatment.

## SECTION 6: COMBUSTION AND EXPLOSION CHARACTERISTICS AND FIRE PROTECTION

Hazard characteristics	Neutralization reaction with acid and heat release. Corrosive to aluminum, zinc and tin in case of moisture, and easy to release explosive hydrogen gas. This product will not burn, and will give off a lot of heat when encountering water and steam, forming corrosivity solution. It is highly corrosive.
Combustion (decomposition) products	May produce harmful toxic fumes.
Fire extinguishing methods and agents	Fog like water and sand. However, it is necessary to prevent articles from splashing in water and causing burns.
Precautions for fire fighting	Avoid the impact of water flow on articles, so as to avoid burning caused by splashing of a large amount of heat when encountering water.

SECTION 7: LEAKAGE EMERGENCY TREATMENT	
Emergency Management	Isolate the leakage contaminated area and set warning signs around to restrict access. It is recommended that emergency handling personnel wear good gas mask (full face mask), wear acid and alkali proof work clothes. Do not touch the leakage directly.
Leakage treatments	Avoid raising dust. Collect it in a dry, clean and covered container with a clean shovel water flushing.

SECTION 8: HANDLING AND STORAGE	
Operation precautions	The operators must be specially trained and strictly abide by the operating procedures. It is recommended that operators wear rubber acid and alkali resistant clothing, wear rubber acid and alkali resistant gloves. Keep away from inflammables and combustibles. Avoid dust generation. Avoid contact with acids. Handle with care to prevent damage to packaging and containers. Equipped with drain emergency treatment equipment is missing. Empty containers may retain harmful substances. When diluting or preparing the solution, alkali should be added to water to avoid boiling and splashing.
Storage precautions	Store in a cool, dry and well ventilated warehouse. Keep away from kindling and heat source. The humidity in the warehouse is the highest no more than 85%. The package must be sealed against moisture. It shall be compatible with combustible (combustible) materials and acids and so on. Do not store them together. The storage area shall be equipped with appropriate materials to contain the leakage.

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#### SECTION 9: EXPOSURE CONTROL/PERSONAL PROTECTION

Eye protection	Wear chemical safety goggles.
Body protection	Wear rubber acid and alkali resistant clothing.
Hand protection	Wear rubber acid and alkali resistant gloves.

SECTION10: PHYSICAL AND CHEMICAL PROPERTIES	
Appearance and properties	Liquid or white opaque solid, easy to deliquescence.
Melting point ( $^{\circ}$ C)	318.4
Boiling point (℃)	1390
Relative density (water=1)	2.12
Saturated vapor pressure (kPa)	0.13 (739 °C)
Solubility	Easily soluble in water, ethanol, glycerin, insoluble in acetone.
Main purpose	Used for chemicals producing and analysis.

SECTION 11: STABILITY AND REACTIVITY	
Stability	stable.
Forbidden compound	Strong acid, flammable or combustible, carbon dioxide, peroxide, water.
Conditions to avoid	Moist air

SECTION 12: TOXICOLOGICAL DATA	
Stability	Stable.
Acute toxicity	LC50: No data available.
Thrill	Rabbit via eye: 1% severe irritation. Rabbit percutaneous: 50mg/24h, severe stimulation.

SECTION 13: WASTE DISPOSAL	
Waste disposal method	Refer to relevant national and local regulations before disposal. After neutralization and dilution, it is discharged into the wastewater system.

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## SECTION 14: TRANSPORTATION INFORMATION

Packaging method	Screw mouth glass bottle, iron cap pressure mouth glass bottle, plastic bottle or ordinary wooden box outside metal barrel (can) threaded glass bottle, plastic bottle or tinned sheet steel barrel (can), full floor lattice box, fiber wooden box or plywood box; Tin plated steel barrel (can), metal barrel (can), plastic bottle or metal corrugated box outside the hose.
Transportation precautions	In railway transportation, steel drum packaging can be transported by gondola. The package shall be complete and the loading shall be safe. During transportation, containers shall be free from leakage, collapse, falling and damage. It is forbidden to mix with combustibles or combustibles, acids, edible chemicals, etc. Transport vehicle during transportation. The vehicle shall be equipped with leakage emergency treatment equipment.

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