

CAUSTIC SODA

IDENTIFICATION

TRADE NAME : Caustic Soda
OTHER NAME : Sodium Hydroxide, Solid; Caustic Soda Flakes; Caustic Soda Pearl;
Caustic Soda Prill.
U.N. NO. : 1823
DG CLASS : 8
PACKAGING GP. : II
HAZCHEM : 2X
POISON SCHEDULE : Schedule 6
USES : Cleaning compounds; Effluent treatment; Chemical Manufacture.

COMPANY NAME: TAU CHEMICALS INC

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1. PHYSICAL DESCRIPTION/ PROPERTIES

Appearance, odour: White, deliquescent strongly alkaline solid in various forms- eg. Pellets, beads, grains, flake, lumps or powder.

Melting Point: 318°C approx.

Boiling Point: 1390°C approx.

Vapour Pressure (20°C): Negligible

Specific Gravity (25°C): 2.13

Flash Point (Open Cup): No known fire haz.

Solubility in Water: Soluble in water. 111g/100g of water.

2. OTHER PROPERTIES

Auto ignition Temperature: No data available

Vapour Density : >1 (Air = 1)

pH (1% solution): >13

Molecular Formula: NaOH

3. INGREDIENTS

Chemical Name CAS Number

Sodium Hydroxide 1310-73-2

HEALTH HAZARD INFORMATION

4. HEALTH EFFECTS

ACUTE EFFECTS

SWALLOWED: Highly corrosive. Swallowing may cause severe burns of mouth, throat and stomach. Severe scarring of tissue and death may result. Symptoms may include bleeding, vomiting, diarrhoea, fall in blood pressure. Damage may appear days after exposure.

EYE: Corrosive to eyes. Causes irritation of eyes and with greater exposure it can cause burns that may result in permanent impairment of vision and even blindness.

SKIN: Corrosive to skin. Contact with skin may cause irritation or severe burns and scarring.

INHALED: Severe irritant. Dust may cause mild irritation to serious damage of the respiratory tract. Symptoms may include sneezing, sore throat or runny nose. Severe pneumonitis may occur.

CHRONIC EFFECTS

Prolonged contact with dilute solution or dust has a destructive effect upon tissue.

5. FIRST AID

SWALLOWED: IF conscious, immediately rinse mouth with water & give water or milk to drink. DO NOT induce vomiting. Seek immediate medical assistance. Do not give liquids to an unconscious person.

EYE: Immediately irrigate with copious quantities of water for at least 15 minutes. Eyelids to be held open. Seek immediate medical assistance.

SKIN: Remove contaminated clothing. Wash affected area with large amount of water. If irritation develops seek immediate medical assistance.

INHALED: Remove victim from exposure. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured ensure airways are clear and administer oxygen. If breathing has stopped apply artificial respiration at once. Seek immediate medical assistance.

6. ADVICE TO DOCTOR

Treat symptomatically and as for exposure to strong alkalis.

PRECAUTIONS FOR USE

7. EXPOSURE STANDARDS

T.W.A. for Sodium Hydroxide is 2mg/m³

8. ENGINEERING CONTROLS

Provide local and/or general exhaust ventilation to keep exposure level below the exposure standard. Local exhaust ventilation is preferred because it can control the emissions of the contaminants at its source preventing its dispersion into the general work area.

9. PERSONAL PROTECTION

Avoid skin and eye contact and inhalation of dust. Wear overalls, safety glasses or goggles and face shield, chemical resistant gloves, chemical suit and boots. Respiratory protection is required if airborne concentration is high or unknown. Use a dust mask/respirator if dust levels are high. Always wash hands before smoking, eating, drinking or using the toilet.

10. FLAMMABILITY

Not flammable. May liberate flammable Hydrogen gas on contact with certain metals such as Aluminium.

SAFE HANDLING INFORMATION

11. STORAGE AND TRANSPORT

Classified as a Class 8 dangerous Good for the Transport of Dangerous Goods by Road and Rail. Store in a cool, dry well-ventilated place away from sources of heat, moisture and incompatibles. Store away from acids and Ammonium salts. Do not store in Aluminium or galvanised containers or use die cast Zinc or Aluminium.

This product generates heat on dilution with water. Heat evolved may cause boiling or spattering.

12. SPILLS

Wear proper protective equipment. Respiratory protection is required in dusty environment. Sweep up spill but avoid generating dust. With a clean shovel, transfer spilled material into clean-labelled containers for disposal. Prevent from entering drains, sewers, streams or other bodies of water. If contamination of sewers or waterways has occurred, advise the local emergency services.

13. DISPOSAL

Refer to State/Territory Land Waste Management Authority. Dispose of material through a licensed waste contractor. Empty containers must be decontaminated.

14. FIRE/EXPLOSION HAZARDS

Not considered to be a fire hazard. Hot or molten material can react violently with water.

EXTINGUISHING MEDIA: Use extinguishing media appropriate for surrounding fire. Water spray, foam, carbon dioxide or dry chemical powder.

Fire fighters to wear self contained breathing apparatus and full protective clothing when fighting fire.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, emits sodium oxide.

Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

OTHER INFORMATION

15. TOXICITY

ACUTE TOXICITY:

Intraperitoneal LD50 (mouse): 40 mg/kg

Oral Lowest Lethal Dose (rabbit): 500mg/kg

Skin (rabbit): severe irritation 500mg/24hr

Eyes (rabbit): severe irritation 1mg/30sec rinse

Highly corrosive to any tissue with which it comes into contact. Produces burns, deep ulceration and gelatinous necrotic areas at the site of contact.

16. ENVIRONMENTAL IMPACT

Avoid contaminating waterways.

Hazard Category: Corrosive

RISK PHRASES:

R35: Causes severe burns

SAFETY PHRASES: S1/2: Keep locked up and out of reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39 Wear suitable gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).

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