



MATERIAL SAFETY DATA SHEET

SODA ASH

1. PRODUCT IDENTIFICATION

Product Name : Soda Ash
Cat No. : 10861
CAS-NO : 497-19-8
Chemical Name : Sodium carbonate, anhydrous
Synonyms : Soda salt, soda crystal/disodium carbonate
Recommended use : Glass industry, metallurgy, Soaps and detergents, chemical intermediates

2. Hazards Identification

Concentration:---
Threshold Limit Value, time-weighted average (TLV-TWA):---
Threshold limit value – short-term exposure limit(TLV-STEL):---

| | Laboratory Species | Route(s) of entry | Dose |
|-----------------------------|--------------------|-------------------|------------|
| (Lethal dose)LD50 | Rat | Oral | 4090 mg/kg |
| (lethal concentration)LC 50 | Rat | Inhalation | 2300 mg/m3 |

3. PHYSICAL AND CHEMICAL PROPERTIES

Boiling point : decomposed
Solubility : soluble in water
Vapour density : not applicable
Physical state, Appearance : solid
Melting point : 853C
Relative density : 2.5
Vapour pressure : nearly zero
Odor : odorless
Appearance : granules, moisture absorber
PH : 11.7(10%)
Freezing point: ----
Molecular weight : 106
Evaporation rate: -----



4. FIRE AND EXPLOSION INFORMATION

Ignition point: not applicable

Auto ignition point: unflamable

Fire extinguishing agent, Fire and explosion hazards: exposable with chloroethane

Oxidizing properties: not applicable

Explosive properties: not applicable

Other information: it doesn't ignite and It does not help the combustion of other materials. Containers containing this substance may explode due to heat.

5. REACTIVITY

Stability: stable, adsorbs air carbon dioxide and forms sodium bicarbonate- No dangerous polymerization

Incompatible chemicals: strong acids, ammonia, metals such as aluminium, magnesium, lithium, Phosphorus pentoxide, Silver nitrate, 2-4-6 Trinitrotoluene

Hazardous decomposition products: Combustion and decomposition products include: Carbon dioxide, carbon monoxide, sodium oxide

6. HEALTH HAZARD INFORMATION

Routs of entry: oral, inhalation, Dermal Absorption

Acute effects: Cough, runny nose Shortness of breath

Chronic effects: Prolonged contact causes perforation of the nasal cavity and skin disease (redness, dryness).

First aid:

Inhalation: If observed, remove the signs of contamination and move the patient to the open air and call a physician

Eye contact: Remove chemicals immediately and gently from contact area. Wash the infected eye with lukewarm water for 20 minutes until the substance is removed from the eye. Avoid spilling the contaminated water into the other eye. Consult with an ophthalmologist immediately in all cases.

Skin: Remove the chemical immediately with a brush from the place of contact with the skin. Then wash the affected area for 5 minutes with running lukewarm water, wash clothes, shoes, and leather items contaminated with this substance with water.

Swallow: Do not give anything by mouth if the victim is unconscious or having a seizure. Rinse the victim's mouth thoroughly with water. Do NOT induce the victim to vomit. Give the victim 240-300 ml of water to dilute the contents of the stomach and Consult with an physician immediately.



7. PREVENTION AND SPECIAL PROTECTION

Personal protective equipment: Masks, safety glasses, gloves, work clothes, aprons, shoe covers

Respiratory protection:

- Use only respiratory protection that conforms to international/ national standards.
- In case of insufficient ventilation, wear suitable respiratory equipment.
- Use NIOSH approved respiratory protection.
- Respirator with a dust filter

Hand protection:

- Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).
- Wear suitable gloves.

Suitable material: Neoprene, Natural Rubber.

Eye protection:

- Dust proof goggles, if dusty.

Skin and body protection:

- Long sleeved clothing
- Dust impervious protective suit
- Rubber or plastic boots
- Rubber or plastic apron

Hygiene measures:

Use only in an area equipped with a safety shower.

Handle in accordance with good industrial hygiene and safety practice.

8. TRANSPORTATION INFORMATION

This chemical substance is not specifically covered by the regulation of transportation of dangerous materials

9. COLLECTION OF WASTE CAUSED BY LEAKAGE

Leakage: In case of leakage, clean the area and inform the occupational health and environment departments

Waste collection(treatment):

Stop discharging sodium carbonate into the environment. Collect the ingredients in the container. Do not allow sodium carbonate to enter sewage or surface water. Collect dry sodium carbonate for recycling or disposal. Chemically neutralize the remaining materials on the ground and wash with water. Mix the washing liquid with soil and sand.



10. ENVIRONMENTAL EFFECTS

- This substance is very dangerous for water
- Do not flush into surface water or sanitary sewer system.
- If the product contaminates rivers and lakes or drains inform respective authorities.
- No known biohazards in normal use

11. ECOLOGICAL INFORMATION

Biodegradability methods are not applicable for mineral materials.

Substance toxicity

Fishes: 300 mg/ L

Crustaceans: 227 mg/L

Chronic toxicity: phytoplankton 14 mg/L

12. TRANSPORTATION AND STORAGE:

Store these materials in a cool, dry and well-ventilated environment. Store this product away from incompatible materials and prevent damage to its contents. Always keep the lid of containers containing this substance closed. The floor of the warehouse must be sealed and without cracks. The warehouse lighting and ventilation system of these materials should be corrosion resistant. Store spilled materials separately in containers compatible with these materials.

13. ACCIDENTAL RELEASE INFORMATION

- Avoid dust formation
- Keep in properly labeled containers
- Keep in suitable, closed containers for disposal.

14. FIRE FIGHTING INFORMATION

- Use extinguishing measures that are appropriate to local circumstances and the surrounding Environment.
- Special exposure hazards in a fire: Not combustible.
- Special protective equipment for fire-fighters: No special precautions required.
- Extinguishing media which must not be used for safety reasons: None

15. FIRST AID INFORMATION

- Inhalation: Remove the subject from dusty environment and let him blow his nose.
- Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
- Skin contact: Remove and wash contaminated clothing before re-use.
- Ingestion: Call a physician immediately,



- If victim is conscious:
If swallowed, rinse mouth with water (only if the person is conscious) Do NOT induce vomiting
- If victim is unconscious but breathing:
Artificial respiration and/or oxygen may be necessary. Never give anything by mouth to an unconscious person.

16. ENGINEERING INFORMATION

- Mechanical Ventilation
- protective placement for the production process or employees
- control and optimization of the production process
- ventilation must be done outside the workspace
- treatment of ventilation gases is necessary to prevent possible pollution of the environment.
- Provide alternative air to the supply of ventilated air.

