



1. DESCRIPTION

Trade Name: SODA ASH

Chemical Class: Alkali Salt

Chemical Name: Sodium carbonate, anhydrous; Carbonic acid, disodium salt; Disodium carbonate

Application: Production of detergents, soaps, textile, paper, other chemicals, oil field usage

Supplier: TEAM Chemicals

Telephone: +44 (0)207 408 7700 - +98 912 3717539

Address: No. 43, Souri St., 43 Ashrafi Esfahani Expressway

2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients

Chemical name	CAS-No	Weight
Sodium carbonate	497-19-8	% 100

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Hazardous in case of skin contact, eye contact or ingestion/ inhalation.

Potential Acute Health Effects:

Swallowed Although ingestion is not thought to produce harmful effects (as classified under EC Directives), the material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident.

Eye Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Skin Contact In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Cold water may be used.

Flush skin and hair with running water and soap. Seek medical attention in event of irritation.

**Potential Chronic Health Effects:**

Contact with concentrated solutions may cause tissue damage "soda ulcers".

Chronic inhalation exposure may result in nasal ulceration and/or perforation of nasal septum.

Irritant YES

Flammable NO

Carcinogenic NO

Oxidant NO

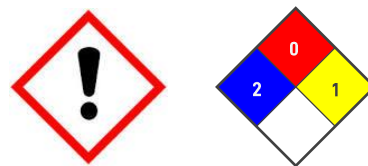
Explosive NO

Environmental Hazard NO

Corrosive NO

(Risk-Phrases) R36/37/38

(Safety-Phrases) S22, S26

**4. FIRST AID MEASURES**

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse.

Thoroughly clean shoes before reuse. Get medical attention.

Inhalation: Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion: Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA Use extinguishing agent suitable for type of surrounding fire.

FIRE FIGHTING Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

FIRE/EXPLOSION HAZARD May decompose upon heating to produce corrosive and/or toxic fumes.

FIRE INCOMPATIBILITY Fumes of sodium oxide. Carbon oxides (COx).

PERSONAL PROTECTION As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.



Tiam Earth Advanced Materials

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Material Safety Datasheet

SODA ASH

www.teamchem.co



6. ACCIDENTAL RELEASE MEASURES

Small Spill:

Do not flush into surface water or sanitary sewer system. Use appropriate tools to put the spilled solid in a convenient waste disposal container. If necessary: Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:

Prevent large quantities of this product from contacting vegetation or waterways. Cover with plastic sheet to prevent spreading. Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as acids.

Storage Precautions: Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

Incompatible products

Aluminum. Powdered aluminum. Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE CONTROLS

PERSONAL PROTECTION Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

RESPIRATOR Dust respirator.

EYE Splash goggles

HAND/FEET Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.

OTHER Full suit. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

ENGINEERING CONTROLS

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.



9. PHYSICAL & CHEMICAL PROPERTIES

Color: White

Odor: Odorless

pH: 11.4 or more(1% sol.)

Boiling Point: Not available

Melting/Freezing Point: 851°C (1563.8°F)

Specific Gravity (Soda Ash D): 2.53-2.54

Specific Gravity (Soda Ash L): 2.51-2.53

Solubility: Soluble in hot water, glycerol. Partially soluble in cold water. Insoluble in acetone, alcohol. (Max 33.2 g/100 ml water [@ 35.4 C degrees])

10. STABILITY & REACTIVITY

Chemical Stability: Stable

Conditions to Avoid: Incompatible materials, moisture

Materials to Avoid: Reactive with acids. Slightly reactive to reactive with moisture.

Special Remarks on Reactivity: Hygroscopic. Combines with water with evolution of heat. Incompatible with phosphorus pentoxide, lithium, fluorine, fluoride, ammonia + silver nitrate, 2,4,6-trinitrotoluene, ammonia, acids, sodium sulfide + water, hydrogen peroxide, red hot aluminum metal, sodium sulfide, zinc, calcium hydroxide. Sodium Carbonate is decomposed by acids with effervescence. Reacts violently with F₂, Lithium, and 2,4,6-trinitrotoluene. Sodium begins to decompose at 400 C to evolve CO₂.

Special Remarks on Corrosivity: Non-corrosive in presence of glass.

11. TOXICOLOGICAL INFORMATION

LD50 Oral 2,800 mg/kg (rat)

L050 Dermal > 2,000 mg/kg (rabbit)

LC50 Inhalation **Eye Contact** Irritating to eyes.

Skin Contact Non-irritating **Sensitization** Patch test on human volunteers did not demonstrate sensitization properties. **Information on toxicological effects** No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity No known effect. **Mutagenicity Carcinogenicity** No information available

Reproductive toxicity Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Single exposure No information available. **Repeated exposure** No information available.

Aspiration hazard No information available.



12. ECOLOGICAL INFORMATION

Ecotoxicity:

Active Ingredient(s)	Duration	Species	Value	Units
Sodium Carbonate	196 h LC50	Bluegill sunfish	1300	mg/l
Sodium Carbonate	148 h EC50	Ceriodaphnia	1200-227	mg/l

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

ECOLOGICAL INFORMATION: Contact TEAM Environmental Affairs for ecological data.

13. DISPOSAL CONSIDERATION

WASTE MANAGEMENT: This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with local regulations.

DISPOSAL METHODS: Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

U.S. DOT: NOT REGULATED

U.S. DOT CLASS: NOT REGULATED

Shipping Description: NOT REGULATED

15. REGULATORY INFORMATION

Classification: Toxicity: refer to section 11 and 12.

Poisons Schedule (SUSMP): None allocated.

This material is listed on the international standard such as OHSAS 18001:2007.

16. ADDITIONAL INFORMATION

3 Yearly Revised Primary MSDS

Update in Toxicological Information

Update in Ecological Information

This MSDS summaries to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. TEAM cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.