

Material Safety Data Sheet



Soda Ash

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	Soda Ash
Chemical Name	Sodium Carbonate, Anhydrous
Synonyms	Disodium Carbonate, Carbonic Acid, Disodium Salt
Chemical Formula	Na ₂ CO ₃
Molecular Weight	105.99
CAS Number	497-19-8
Grade Names	Technical grade soda ash, High purity grade soda ash
General Use	Glass manufacturing, chemical manufacturing, pulp and paper, water treatment and pH control, soap and detergent manufacturing, coal treatment, emission control, iron exchange resin regeneration
Manufacturer	OCI Chemical Corporation Five Concourse Parkway, Suite 2500 Atlanta, Georgia 30328
Emergency Telephone Numbers	For emergencies involving a spill, leak, fire or exposure, contact: » United States.....CHEMTREC..... (800) 424-9300 » Canada.....CANUTEC..... (613) 996-6666
General or Product Information	OCI Chemical Corporation (800) 865-1774
Issue Date	June 28, 2011

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Materials	CAS #	ENIECS Number	Concentration
Sodium Carbonate	497-19-8	207-838-8	99.8% by wt.

SECTION 3. HAZARDS IDENTIFICATION**Emergency Overview**

- White, odorless, granular solid
- Exposure may cause irritation to eyes, skin, and respiratory tract
- Product is non-combustible
- Reacts with acids to form carbon dioxide gas and heat

Potential Health Effects**Inhalation**

- May cause upper respiratory tract, lung, and irritation to mucus membranes

Eye Contact

- May cause severe irritation, redness, or swelling

Skin Contact

- May cause itching, redness, or swelling

Ingestion

- May cause gastrointestinal irritation, nausea, vomiting, or diarrhea

SECTION 4. FIRST AID MEASURES**Eye Exposure**

- Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes
- Seek immediate medical attention

Skin Exposure

- In case of contact, immediately wash with plenty of soap and water for at least 5 minutes
- See medical attention if irritation develops or persists
- Remove contaminated clothing and shoes
- Clean contaminated clothing and shoes before re-use

Inhalation

- Remove victim from immediate source of exposure and assure that the victim is breathing
- If breathing is difficult, administer oxygen, if available
- If victim is not breathing, administer CPR (cardio-pulmonary resuscitation)
- Seek immediate medical attention

Ingestion

- If victim is conscious and alert, give 1-2 glasses of water to drink
- Do not give anything by mouth to an unconscious person
- Seek immediate medical attention
- Do not leave victim unattended

SECTION 5. FIRE FIGHTING MEASURES

Flash Point

- Not Applicable

Extinguishing Media

- Not combustible
- Use extinguishing method suitable for surrounding fire

Special Fire Fighting Procedures

- Firefighters should wear full protective clothing and self-contained breathing apparatus

Unusual Fire and Explosion Hazards

- Not combustible

Hazardous Decomposition Materials

- Carbon Dioxide

SECTION 6. ACCIDENTAL RELEASE MASURES

Evacuation Procedures and Safety

- Ventilate closed spaces before entering
- Wear appropriate protective gear for situation
- See Personal Protection information in Section 8

Containment of Spill

- Follow procedure described below under Cleanup and Disposal of Spill

Cleanup and Disposal of Spill

- Scrape up and place in appropriate closed container (see Section 7: Handling and Storage)
- Collect washing for disposal
- Decontaminate tools and equipment following clean up
- Clean up residual material by washing area with water
- Avoid creation of dusty conditions

Environmental and Regulatory Reporting

- Do not flush to drain
- If spilled on the ground, the affected area should be scraped clean and placed in an appropriate container for disposal
- Prevent material from entering public sewer system or any waterways
- Large spills should be handled according to a predetermined plan
 - For assistance in developing a plan, contact the Technical Service Department using the Product Information phone number in Section 1

SECTION 7. HANDLING AND STORAGE**Minimum/Maximum Storage Temperatures**

- Not Available

Handling

- Do not get in eyes
- Do not breathe dusts
- Avoid direct or prolonged contact with skin

Storage

- Store in an area that is cool, dry, well ventilated

SECTION 8. EXPOSURE CONTROL AND PERSONAL PROTECTION**Introductory Remarks**

- These recommendations provide general guidance for handling this product. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping systems for maintenance and repairs. Waste resulting from these procedures should be handled in accordance with Section 13: Disposal Considerations.
- Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure Guidelines

- Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting OSHA requirements.
- The following limits (AGGIH, OSHA and other) apply to this material, where, if indicated, S = Skin and C = Ceiling Limit.

PARTICULATES NOT OTHERWISE REGULATED RESPIRABLE FRACTION

	TWA	STEL
OSHA	5 mg / cu m ³	NA

Engineering Controls

Where engineering control are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures.

Respiratory Protection

- When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the latest OSHA standard (29 CFR 1910.134) and/or ANSI Z88.2 recommendations.

- Under normal conditions, in the absence of other airborne contaminants, the following devices should provide protection from this material up to the conditions specified by OSHA / ANSI: Air -purifying (half-mask / full-face) respirator with cartridges / canister approved for use against dusts, mists and fumes.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Physical Appearance.....	White, granular, solid
Odor.....	Odorless
Melting Point Range.....	851°C (1,564°F)
Boiling Point Range.....	Not available
pH.....	11.3 (1% Solution)
Vapor Density	Not available
Specific Gravity.....	2.53 g/ml at 20°C (68°F)
Molecular Weight.....	105.99

SECTION 10. STABILITY AND REACTIVITY**Chemical Stability**

- This material is stable under normal handling and storage conditions described in Section 7

Conditions to be Avoided

- Extreme Heat; Hygroscopic
- Protect from moisture
- Mixing of acid and sodium carbonate solutions could cause CO₂ evolution

Materials / Chemicals to be Avoided

- Aluminum Fluorine Humid Air Moisture Sulfuric Acid Acids Magnesium Phosphorus Pentoxide

Decomposition Temperature Range

- 400°C (752°F)

The Following Hazardous Decomposition Products Might Be Expected

Decomposition Type: Thermal
Carbon Dioxide

Hazardous Polymerization Will Not Occur. Avoid the Following to Inhibit Hazardous Polymerization

- Not applicable

SECTION 11. TOXICOLOGICAL INFORMATION**Acute Eye Irritation: Toxicological Information and Interpretation**

Eye – Eye Irritation, 25 mg/Kg, Rabbit. Severely Irritating; Muscle contraction or spasticity.

Acute Skin Irritation: Toxicological Information and Interpretation

Skin – 500 mg/24 hour Skin Irritation, Rabbit. Mildly irritating.

Acute Dermal Toxicity

LD₅₀. Rabbit: >2,000 mg/kg

Acute Inhalation Toxicity: Toxicological Information and Interpretation

LD₅₀ – Lethal Concentration. 50% of Test Species, 2,300 mg/cu m/2hr, rat.

Acute Oral Toxicity: Toxicological Information and Interpretation

LD₅₀ – Lethal Dose. 50% of Test Species, 4,090 mg/kg, rat.

Chronic Toxicity

This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probably” or “suspected” human carcinogens

No additional test data found for product.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicological Information**

- No data found for product

Chemical Fate Information

- No data found for product

SECTION 13. DISPOSAL CONSIDERATION**Waste Disposal Method**

Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal laws and regulations. Consult state and local regulations regarding the proper disposal of this material.

Container Handling and Disposal

- Rinse containers before disposal

EPA Hazardous Waste

- NO

SECTION 14. TRANSPORT INFORMATION**Transportation Status**

- US Department of Transportation

DOT Shipping Name

- NOT REGULATED

SECTION 15. REGULATORY INFORMATION**FEDERAL REGULATIONS****TSCA Inventory List**

- All ingredients of this product are listed on the TSCA Inventory

SARA Title III Hazard Classes

Fire Hazard.....	NO
Reactive Hazard.....	NO
Release of Pressure.....	NO
Acute Health Hazard.....	YES
Chronic Health Hazard.....	NO

STATE REGULATIONS

This product does not contain any components that are regulated under California Proposition 65

SECTION 16. OTHER INFORMATION**National Fire Protection Association Hazard Ratings - NFPA(R)**

2 Health Hazard Rating.....	Moderate
0 Flammability Rating.....	Minimal
0 Reactivity Rating.....	Minimal

National Paint & Coating Hazardous Materials Identification System (HMIS(R))

2 Health Hazard Rating.....	Moderate
0 Flammability Rating.....	Minimal
0 Reactivity Rating.....	Minimal

Certified to ANSI/NSF 60 - Soda Ash Dense Bulk: This product is certified ANSI/NSF 60 when used in treatment of drinking water at maximum dosage of 100 mg/L.

Reason for Revisions

Change and/or addition made to Section 1, 2, 11 and 16

CANADIAN WHMIS REGULATIONS

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS: H = 2, F = 0, R = 0

Key Legend Information

NAV..... Not Available
NAP..... Not Applicable
ND..... Not Determined
ACGIH..... American Conference of Governmental Industrial Hygienists
OSHA..... Occupational Safety and Health Administration
TLV..... Threshold Limit Value
PEL..... Permissible Exposure Limit
TWA..... Time Weighted Average
STEL..... Short-Term Exposure Limit
NTP..... National Toxicology Program
IARC..... International Agency for Research on Cancer
WHMIS..... Workplace Hazardous Materials Information System

Disclaimer

The information herein is given in good faith but no warranty, expressed or implied, is made.