

# Material Safety Data Sheet

## Sodium Carbonate, Anhydrous

MSDS #: 497-19-8  
Revision Date: 2011-08-03  
Version 0.01



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

### 1. PRODUCT AND COMPANY IDENTIFICATION

<b>Product name</b>	<b>Sodium Carbonate, Anhydrous</b>
<b>Alternate Commercial Name</b>	Soda Ash
<b>Chemical Name</b>	Sodium Carbonate
<b>Formula</b>	CH <sub>2</sub> O <sub>3</sub> .2Na
<b>Chemical Family</b>	Alkali salt
<b>Synonyms</b>	Sodium carbonate; Carbonic acid, disodium salt; Disodium carbonate
<b>Recommended use</b>	Water treatment chemical; Detergent; Personal care; Glass manufacture , Chemical processing.
<b>Manufacturer</b>	<b>Emergency telephone number</b>
FMC Wyoming Corporation Alkali Chemicals Division 1735 Market Street Philadelphia, PA 19103	For leak, fire, spill or accident emergencies, call: (800) 424-9300 (CHEMTREC - U.S.A.) +1 (703) 527-3887 (CHEMTREC - Collect - All Other Countries) +1 307.872.2452 (Plant - Green River, WY) +1 303.595.9048 (Medical - Call Collect)

### 2. Hazards identification

#### Emergency Overview

Severe eye irritation  
May cause skin irritation and/or dermatitis  
White, odorless granular solid

#### Potential health effects

#### Acute toxicity

<b>Eyes</b>	Severely irritating to eyes. Avoid contact with eyes.
<b>Skin</b>	Repeated exposure may cause skin dryness or cracking. Wash thoroughly after handling.
<b>Inhalation</b>	Inhalation of dust in high concentration may cause irritation of respiratory system.

#### Chronic Toxicity

No known effect.

### 3. Composition/information on ingredients

#### Ingredients

Chemical Name	CAS-No	Weight %
sodium carbonate	497-19-8	100

**4. First aid measures**

<b>Eye contact</b>	In case of eye contact, remove contact lenses and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off with warm water and soap. Get medical attention if irritation develops and persists. Remove and wash contaminated clothing before re-use.
<b>Inhalation</b>	Remove person to fresh air. If signs/symptoms continue, get medical attention.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. If symptoms persist, call a physician.

**5. Fire-fighting measures**

<b>Flammable properties</b>	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.
<b>Flash Point</b>	Not combustible
<b>Suitable extinguishing media</b>	Use extinguishing agent suitable for type of surrounding fire.
<b>Hazardous combustion products</b>	Fumes of sodium oxide.
<b>Explosion Data</b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive.
<b>Sensitivity to Static Discharge</b>	Not sensitive.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear.

<b>NFPA</b>	<b>Health Hazard 2</b>	<b>Flammability 0</b>	<b>Stability 0</b>	<b>Special Hazards -</b>
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**NFPA/HMIS Ratings Legend**      Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

**6. Accidental release measures**

<b>Personal precautions</b>	Avoid dust formation. Sweep up to prevent slipping hazard.
<b>Methods for containment</b>	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.
<b>Methods for cleaning up</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal. Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal.

**7. Handling and storage**

<b>Handling</b>	Ensure adequate ventilation. Keep away from incompatible products (acids).
<b>Storage</b>	Store in original container. Keep in properly labeled containers. Keep containers tightly closed in a cool, well-ventilated place. Keep away from incompatible products (acids).
<b>Specific use(s)</b>	Ensure that eyewash stations and safety showers are close to the workstation location

## 8. Exposure controls/personal protection

### Exposure guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. Local nuisance dust standards apply.

### Occupational exposure controls

#### Engineering measures

Apply technical measures to comply with the occupational exposure limits. Provide appropriate exhaust ventilation at places where dust is formed.

### Personal protective equipment

#### General Information

Protective engineering solutions should be implemented and in use before personal protective equipment is considered.

#### Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

#### Eye/face protection

Tightly fitting safety goggles

#### Skin and body protection

Wear protective gloves/clothing.

#### Hand protection

Natural Rubber, Neoprene gloves

### Hygiene measures

When using, do not eat, drink or smoke. Wash hands before breaks and at the end of workday. Handle in accordance with good industrial hygiene and safety practice. Ensure that safety showers and eyewash stations are close to the workstation location.

## 9. Physical and chemical properties

Appearance	granules
Color	white
Physical State	Solid
Odor	odorless
Odor Threshold	not applicable
pH	11.4 (as aqueous solution)
Melting Point/Range	851 °C
Freezing point	No information available
Boiling Point/Range	not applicable
Flash Point	Not combustible
Evaporation rate	not applicable
Autoignition Temperature	Not combustible
Flammable properties	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes
Vapor pressure	not applicable
Vapor density	No information available
Density	No information available
Specific Gravity	No information available
Bulk density	0.86 - 1.12 g/cm <sup>3</sup> (Dense grades) 0.70 - 0.90 g/cm <sup>3</sup> (Light Grades)
Molecular Weight	105.99
Water solubility	212.5 g/L @ 20 °C
Percent volatile	No information available
Partition coefficient:	not applicable
Viscosity	No information available
Decomposition temperature	400 °C

**Explosive properties** Not explosive  
**Oxidizing properties** Non-oxidizing

## 10. Stability and reactivity

**Stability** Stable.

**Conditions to avoid** Exposure to air or moisture over prolonged periods

**Materials to avoid** Powdered aluminum

**Hazardous decomposition products** Sodium oxides

**Hazardous polymerization** Hazardous polymerization does not occur.

**Hazardous reactions** None under normal processing.

## 11. Toxicological information

### Acute effects

**Eye irritation** Severe irritant (rabbit)  
**Skin irritation** Non-irritating to the skin

**LD50 Oral** 2,800 mg/kg (rat)  
**LD50 Dermal** > 2,000 mg/kg (rabbit)  
**LC50 Inhalation:** 800 mg/m<sup>3</sup> (guinea pig)

**Sensitization** Patch test on human volunteers did not demonstrate sensitization properties.

### Chronic Toxicity

**Chronic Toxicity** No known effect.

**Carcinogenicity** Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

## 12. Ecological information

### Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
sodium carbonate	242 mg/L EC50 120 h (Nitzschia)	LC50 300 mg/L Lepomis macrochirus 96 h LC50 310 - 1220 mg/L Pimephales promelas 96 h		EC50 265 mg/L 48 h

**Persistence and degradability** Biodegradability does not pertain to inorganic substances. .

**Bioaccumulation** Does not bioaccumulate.

**Mobility** Dissociates into ions.

Other adverse effects                      None known

### 13. Disposal considerations

**Waste disposal methods**                      This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements

**Contaminated packaging**                      Where possible recycling is preferred to disposal or incineration. Clean container with water. Dispose of rinse water in accordance with local and national guidelines.

### 14. Transport information

**DOT**    not regulated

**TDG**    not regulated

**ICAO/IATA**    not regulated

**IMDG/IMO**    not regulated

### 15. Regulatory information

#### International Inventories

<b>TSCA Inventory (United States of America)</b>	Complies
<b>DSL (Canada)</b>	Complies
<b>NDSL (Canada)</b>	Complies
<b>EINECS/ELINCS (Europe)</b>	Complies
<b>ENCS (Japan)</b>	Complies
<b>IECSC (China)</b>	Complies
<b>KECL (Korea)</b>	Complies
<b>PICCS (Philippines)</b>	Complies
<b>AICS (Australia)</b>	Complies
<b>NZIoC (New Zealand)</b>	Complies

#### U.S. Federal Regulations

##### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

##### **SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	yes
<b>Chronic Health Hazard</b>	No
<b>Fire Hazard</b>	No
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**International Regulations**

**Mexico - Grade** No information available

**Canada**

**This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.**

**WHMIS Hazard Class**

D2B Toxic materials

E Corrosive material



**16. Other information**

<b>HMIS</b>	<b>Health Hazard 2</b>	<b>Flammability 0</b>	<b>Stability 0</b>	<b>Special precautions -</b>
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**NFPA/HMIS Ratings Legend** Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

**Revision Date:** 2011-08-03  
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**End of Material Safety Data Sheet**