

Material Safety Data Sheet

Sodium Carbonate, Anhydrous

MSDS #: 497-19-8
Revision Date: 2014-01-30
Version 1



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

1. PRODUCT AND COMPANY IDENTIFICATION

Product name	Sodium Carbonate, Anhydrous
Alternate Commercial Name	Soda Ash
Chemical Name	Sodium Carbonate
Synonyms	Sodium carbonate; Carbonic acid, disodium salt; Disodium carbonate
Formula	Na ₂ CO ₃
Chemical Family	Alkali salt
Recommended use:	Glass manufacture ; Personal care; Detergent; Water treatment chemical; Chemical processing
Manufacturer	Emergency telephone number
FMC Wyoming Corporation Alkali Chemicals Division 1735 Market Street Philadelphia, PA 19103 Tel: +1 215 / 299 6000 E-Mail: msdsinfo@fmc.com	For leak, fire, spill or accident emergencies, call: 1 800 / 424 9300 (CHEMTREC - U.S.A.) 1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries) 1 303 / 595 9048 (Medical - U.S. - Call Collect) 1 307 / 872 2452 (Plant - Green River, WY)

2. HAZARDS IDENTIFICATION

Emergency Overview

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

Potential health effects

Acute Toxicity

Eyes Severely irritating (eyes). Avoid contact with eyes.
Skin Repeated exposure may cause skin dryness or cracking. Wash thoroughly after handling.
Inhalation 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

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

5. FIRE-FIGHTING MEASURES

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

NFPA	Health Hazard 2	Flammability 0	Stability 0	Special Hazards -
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6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

Handling	Ensure adequate ventilation. Keep away from incompatible products (acids).
Storage	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).

8. EXPOSURE CONTROL / PERSONAL PROTECTION

<u>Exposure guidelines</u>	Contains no substances with occupational exposure limit values. Local nuisance dust standards apply.
<u>Occupational exposure controls</u>	
Engineering measures	Apply technical measures to comply with the occupational exposure limits. Provide appropriate exhaust ventilation at places where dust is formed.
General Information	These recommendations apply to the product as supplied
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 eyewash stations and safety showers are close to the workstation location

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	granules
Color	white
Physical state	solid
Odor	Odorless
Odor Threshold	Not applicable
pH	11.4 (1 % 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
Flammable properties	Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes
Oxidizing properties	Non-oxidizing
Explosive properties	Not explosive
Vapor pressure	No information available
Vapor density	No information available
Relative density	2.52
Bulk density	0.86 - 1.12 g/cm ³ (Dense grades) 0.70 - 0.90 g/cm ³ (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
Autoignition Temperature	Not combustible

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 Inhalation800 mg/m³ (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****sodium carbonate (497-19-8)**

Active Ingredient(s)	Duration	Species	Value	Units
Sodium Carbonate	96 h LC50	Bluegill sunfish	300	mg/L
Sodium Carbonate	48 h EC50	Ceriodaphnia	200-227	mg/L

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

<u>DOT</u>	not regulated
<u>TDG</u>	not regulated
<u>ICAO/IATA</u>	not regulated
<u>IMDG/IMO</u>	not regulated

15. REGULATORY INFORMATION**International Inventories**

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

Acute Health Hazard	yes
Chronic Health Hazard	no
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	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 Moderate risk, Grade 2

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.

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WHMIS Hazard Class

D2B Toxic materials, Eye irritation
Class E : Corrosive to aluminum. Not corrosive to animal skin or carbon steel.



16. OTHER INFORMATION

HMIS	Health Hazard 2	Flammability 0	Stability 0	Special precautions -
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NFPA/HMIS Ratings Legend

Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications

This product meets the chemical testing specifications defined in the Food Chemicals Codex (FCC), 8th Edition.

This product is certified to NSF/ANSI Standard 60 for use in drinking water treatment at the specified maximum use limit. The MUL (maximum use level) for sodium carbonate, anhydrous is 150 mg/L under NSF/ANSI Standard 60.



American Water Works Association

Revision Date: 2014-01-30
Reason for revision: (M)SDS sections updated. 16.

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End of Material Safety Data Sheet