



GARDINA, CA
NEW BRUNSWICK, NJ

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
See Section 15.		

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/ Trade Name	Sodium carbonate	
Manufacturer	ProChem, Inc. 826 Roosevelt Rd Rockford, IL 61109	
Commercial Name(s)	Not available.	
Synonym	Crystal Carbonate, Disodium Carbonate, Sal Soda, Soda Ash, Washing Soda	
Chemical Name	Sodium Carbonate, Anhydrous	
Chemical Family	Not available.	
Chemical Formula	Na₂CO₃	
Supplier		
	CAS#	497-19-8
	RTECS	VZ4050000
	TSCA	TSCA 8(b) inventory: Sodium carbonate
	CI#	Not available.
IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 815-398-1788		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Sodium carbonate	497-19-8				100
Toxicological Data on Ingredients Sodium carbonate: ORAL (LD50): Acute: 4090 mg/kg [Rat]. 6600 mg/kg [Mouse]. DUST (LC50): Acute: 2300 mg/m ³ 2 hours [Rat]. 1200 mg/m ³ 2 hours [Mouse].					

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Potential Chronic Health Effects	Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to upper respiratory tract, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 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.
Serious Skin Contact	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Emits Na ₂ O fumes when heated to decomposition.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Sodium carbonate can ignite and burn fiercely in contact with fluoride. Sodium Carbonate in contact with fluorine decomposed at ordinary temperature with incandescence.
Special Remarks on Explosion Hazards	Reacts explosively with red-hot aluminum metal. Sodium carbonate + ammonia in arabic gum solution will explode.

Section 6. Accidental Release Measures

Small Spill	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	Use a shovel to put the material into a convenient waste disposal container. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

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

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Dust respirator. 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.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Solid powder.)	Odor	Odorless.
Molecular Weight	105.99 g/mole	Taste	Alkaline.
pH (1% soln/water)	11.5 [Basic.]	Color	White.
Boiling Point	Not available.		
Melting Point	851°C (1563.8°F)		
Critical Temperature	Not available.		
Specific Gravity	Density: 2.532 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water.		
Solubility	Soluble in hot water, glycerol. Partially soluble in cold water. Insoluble in acetone, alcohol.		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials, moisture
Incompatibility with various substances	Reactive with acids. Slightly reactive to reactive with moisture.

Corrosivity	Non-corrosive in presence of glass.
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 F ₂ , Lithium, and 2,4,6-trinitrotoluene. Sodium begins to decompose at 400 C to evolve CO ₂ .
Special Remarks on Corrosivity	Hot concentrated solutions of sodium carbonate are mildly corrosive to steel.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Inhalation. Ingestion.
Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 4090 mg/kg [Rat]. Acute toxicity of the dust (LC50): 1200 mg/m ³ 2 hours [Mouse].
Chronic Effects on Humans	May cause damage to the following organs: upper respiratory tract, skin, eyes.
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).
Special Remarks on Toxicity to Animals	LDL (Lowest Published Lethal Dose) [Man] - Route: Oral; Dose: 714 mg/kg
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects based on animal test data
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation with possible burns depending on the concentration, site (abraded or intact skin), and duration of exposure. Eyes: Causes eye irritation and possible burns. Concentrated solutions may cause permanent corneal injury (permanent corneal opacity). Ingestion: Sodium carbonate ingestion may cause irritation of the digestive tract resulting in nausea, vomiting, diarrhea, thirst, abdominal pain depending on concentration and amount ingested. May also affect the cardiovascular system. Inhalation: Dust may cause respiratory tract and mucous membrane irritation with coughing and shortness of breath (dyspnea), pulmonary edema. Chronic Potential Health Effects: Chronic inhalation may result in decreased pulmonary function, nasal congestion, nosebleeds, perforation of the nasal septum. Other effects of chronic exposure are skin (dermatitis and ulceration), and gastrointestinal complaints. However, the effects of chronic exposure seem to be reversible if exposure is decreased.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
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.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

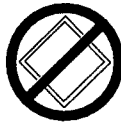
Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations TSCA 8(b) inventory: Sodium carbonate

California Proposition 65 Warnings

Other Regulations EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications

WHMIS (Canada) CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC) R36/37/38- Irritating to eyes, respiratory system and skin. S22- Do not breathe dust. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

HMIS (U.S.A.)

Health Hazard	2
Flammability	0
Reactivity	1
Personal Protection	E

National Fire Protection Association (U.S.A.)

Health	2	Flammability	0
Reactivity	1	Specific hazard	

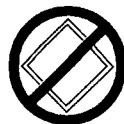
WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe)
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Protective Equipment



Gloves.



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

Section 16. Other Information

References Not available.

Other Special Considerations Not available.

PREPARATION DATE: SEPT. 2005

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, ProChem Chemicals Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.