



# Safety Data Sheet

## Section 01 - Product And Company Identification

<b>Product Identifier</b>	Soda Ash, Dense
<b>Other Means of Identification</b>	Disodium carbonate, calcined soda, soda ash, soda ash light, sodium carbonate, carbonic acid, disodium salt, sodium carbonate anhydrous, bisodium carbonate, sodium salt, chrysol carbonate, soda, soda monohydrate, sodium carbonate decahydrate, sodium carbonate heptahydrate, sodium carbonate monohydrate, solvay soda, and washing soda.
<b>Product Use and Restrictions on Use</b>	Glass manufacture, detergent manufacture, sodium chemical manufacture, carbonate chemicals manufacture, pulp and paper, brine treatment, water hardness removal, pH adjustment in water or waste water, flue gas desulfurization, coal treatment, ion exchange resin regeneration.
<b>Initial Supplier Identifier</b>	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
<b>Prepared By</b>	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
<b>24-Hour Emergency Phone</b>	Phone: 1 (306) 664 – 2522

## Section 02 - Hazard Identification

### GHS-Classification

**Serious Eye Damage/Irritation** Category 2

### Physical Hazards

No known physical hazards.

### Warning

### Hazards Statements

H319 – Causes serious eye irritation.

### Pictograms



### Precautionary Statements

P264 – Wash hands thoroughly after handling.

P280 – Wear eye protection and face protection.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 – If eye irritation persists: Get medical advice/attention.

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## Section 03 - Composition / Information on Ingredients

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Chemical Name	CAS Number	Weight %	Unique Identifiers
Sodium Carbonate	497-19-8	>99%	

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## Section 04 - First Aid Measures

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<b>Inhalation</b>	If symptoms are experienced, remove source of contamination or move victim to fresh air. Seek medical attention.
<b>Skin Contact / Absorption</b>	Remove contaminated clothing. Wash affected area with soap and water for 5 minutes. Seek medical attention. Completely decontaminate clothing, shoes, and leather goods before re-use or discard.
<b>Eye Contact</b>	Contact lenses should never be worn when working with this product. Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. If irritation persists, seek medical attention.
<b>Ingestion</b>	If irritation or discomfort occur, obtain medical advice.
<b>Additional Information</b>	While internal toxicity is low, irritant effects of high concentrations may produce corneal opacities, and vesicular skin reactions in humans with abraded skin only. Treatment is symptomatic and supportive.

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## Section 05 - Fire Fighting Measures

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<b>Suitable Extinguishing Media</b>	Product does not burn. Use appropriate extinguishing media for material that is supplying the fuel to the fire.
<b>Unsuitable Extinguishing Media</b>	Not Available
<b>Specific Hazards Arising From the Chemical</b>	Corrosive fumes of sodium oxide, carbon monoxide and carbon dioxide are formed in a fire. Sodium carbonate slowly begins to decompose into corrosive sodium oxide and carbon dioxide at 400°C. Closed containers may rupture violently when heated.
<b>Special Protective Equipment and Precautions for Fire-Fighters</b>	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
<b>Further Information</b>	Not Available

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## Section 06 - Accidental Release Measures

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<b>Personal Precautions / Protective Equipment / Emergency Procedures</b>	Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Remove chemicals that can react with the spilled material. If required, notify government occupational health and safety and environmental authorities.
<b>Environmental Precautions</b>	Do not allow sodium carbonate to enter sewers or water systems.
<b>Methods and Materials for Containment and Cleaning Up</b>	Contain material. Shovel or sweep up dry sodium carbonate for recycling or disposal. Neutralize final traces and flush area with water. Contain spilled solutions by diking with absorbent material, such as sand or earth. Solutions can be recovered or carefully diluted with water and cautiously neutralized with acids such as acetic acid or hydrochloric acid.

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## Section 07 - Handling and Storage

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<b>Precautions for Safe Handling</b>	This material is an EYE IRRITANT and CORROSIVE (to aluminum). Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure. Avoid generating dust.
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**Conditions for Safe Storage** Product is hygroscopic and tends to cake on storage. Store in a cool, dry well ventilated place. Keep container tightly closed away from acids and metals such as aluminum and magnesium.

**Incompatibilities** Aluminium, fluorine, humid air, moisture, acids, magnesium, phosphorus pentoxide, molten lithium, ammonia, nitromethane, phosphorus trichloride, calcium hypochlorite.

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## **Section 08 - Exposure Controls and Personal Protection**

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### **Exposure Limit(s)**

<b>Component</b>	<b>Regulation</b>	<b>Type of Listing</b>	<b>Value</b>
Sodium Carbonate	Not Established		

### **Engineering Control(s)**

**Ventilation Requirements** Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

**Other** Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

### **Protective Equipment**

**Eyes/Face** Chemical safety goggles. A face shield may also be necessary.

**Hand Protection** No specific requirement, but it is good practice to prevent skin contact.

**Skin and Body Protection** No specific requirement, but it is good practice to prevent skin contact. Wash contaminated clothing and dry thoroughly before reuse.

No special footwear is required other than what is mandated at place of work.

**Respiratory Protection** Respiratory protection is not normally required. If use creates dust formations, then a NIOSH approved respirator with a dust cartridge is recommended.

**Thermal Hazards** Not Available

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## **Section 09 - Physical and Chemical Properties**

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### **Appearance**

**Physical State** Crystalline solid, powder. Grains or lumps.

**Colour** White

**Odour** Odourless

**Odour Threshold** Not Applicable

### **Property**

**pH** 10.9 (0.1% solution)

**Melting Point/Freezing Point** 851°C

**Initial Boiling Point and Boiling Range** Not Applicable. Decomposes.

<b>Flash Point</b>	Not Applicable
<b>Evaporation Rate</b>	Negligible
<b>Flammability</b>	Non-Flammable
<b>Upper Flammable Limit</b>	Not Applicable
<b>Lower Flammable Limit</b>	Not Applicable
<b>Vapour Pressure (mm Hg, 20°C)</b>	Not Applicable
<b>Vapour Density (Air=1)</b>	Not Applicable
<b>Relative Density</b>	Not Available
<b>Solubility(ies)</b>	212.5 g/L water @ 20 °C Soluble in glycerol, insoluble in ethanol and acetone.
<b>Partition Coefficient: n-octanol/water</b>	Not Applicable
<b>Auto-ignition Temperature</b>	Not Applicable
<b>Decomposition Temperature</b>	>400°C
<b>Viscosity</b>	Not Applicable
<b>Explosive Properties</b>	Not Applicable
<b>Specific Gravity (Water=1)</b>	2.53
<b>% Volatiles by Volume</b>	Not Applicable
<b>Formula</b>	Na <sub>2</sub> CO <sub>3</sub>
<b>Molecular Weight</b>	105.99

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## Section 10 - Stability and Reactivity

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<b>Reactivity</b>	Reacts with water vapour above 400°C to form sodium hydroxide and carbon dioxide.
<b>Stability</b>	Stable. Absorbs moisture and carbon dioxide from the air to form sodium bicarbonate.
<b>Possibility of Hazardous Reactions</b>	None known.
<b>Conditions to Avoid</b>	Generation of dust.
<b>Incompatible Materials</b>	Acids, ammonia, silver nitrate, aluminum, calcium hypochlorite, sodium hydrogen sulfate, starch, fluorine, phosphorus pentoxide, lithium, nitromethane, phosphorus trichloride, magnesium, 2,4,6-trinitrotoluene.
<b>Hazardous Decomposition Products</b>	Corrosive fumes of sodium oxide, carbon monoxide and carbon dioxide are formed in a fire.

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## Section 11 - Toxicological Information

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### Acute Toxicity

Component	Oral LD <sub>50</sub>	Dermal LD <sub>50</sub>	Inhalation LC <sub>50</sub>
Sodium Carbonate	2800mg/kg (rat)	> 2000mg/kg (rat)	400mg/m <sup>3</sup> (guinea pig, 4hr)

### Chronic Toxicity – Carcinogenicity

Component	IARC
Sodium Carbonate	Not considered to be carcinogenic by IARC, NTP, ACGIH and OSHA

<b>Skin Corrosion/Irritation</b>	Sodium carbonate moistened with water is a mild irritant. None to very mild irritation was observed when it was applied dry.
<b>Ingestion</b>	Low acute oral toxicity. May cause nausea, vomiting, diarrhea, irritation, and stomach ache.
<b>Inhalation</b>	May cause upper respiratory tract irritation.
<b>Serious Eye Damage/Irritation</b>	Can cause serious eye damage. Capable of producing severe eye burns, permanent injury including blindness.
<b>Respiratory or Skin Sensitization</b>	Not known to be a respiratory or skin sensitizer.
<b>Germ Cell Mutagenicity</b>	Not known to be a mutagen.
<b>Reproductive Toxicity</b>	No risk of developmental or reproductive toxicity.
<b>STOT-Single Exposure</b>	Due to its alkaline properties, an irritation of the respiratory tract is possible.
<b>STOT-Repeated Exposure</b>	Not Available
<b>Aspiration Hazard</b>	Not Available
<b>Synergistic Materials</b>	Not Available

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## Section 12 – Ecological Information

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### Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Sodium Carbonate	EC <sub>50</sub> (Diatom, 96hr): 242 mg/L	LC <sub>50</sub> (Lepomis macrochirus, 24hr): 167mg/L	LC <sub>50</sub> (Daphnia magna, 24hr): 196mg/L
<b>Biodegradability</b>	Not Available		
<b>Bioaccumulation</b>	Low potential for bioaccumulation. [Low Kow <4]		
<b>Mobility</b>	Not Available		
<b>Other Adverse Effects</b>	Not Available		

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## Section 13 – Disposal Considerations

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<b>Waste From Residues/Unused Products</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.
<b>Contaminated Packaging</b>	Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

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## Section 14 – Transport Information

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UN Number	Not Regulated
UN Proper Shipping Name	Not Regulated
Transport Hazard Class(es)	Not Regulated
Packaging Group	Not Regulated
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.
Special Precautions	Not Available
Transport in Bulk	Not Available

### TDG

**Other** Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

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## Section 15 – Regulatory Information

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**NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.**

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## Section 16 – Other Information

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**Preparation Date** September 1, 2015

**Note:** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

### **Attention: Receiver of the chemical goods / SDS coordinator**

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution<sup>®</sup> initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

### **References:**

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA

### **ClearTech Industries Inc. - Locations**

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