

## Soda Ash Dense

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                               |                                                                                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                  | Soda Ash Dense                                                                                                                                              |
| Product Identifier            | Soda Ash Dense                                                                                                                                              |
| MSDS No.                      | 0040                                                                                                                                                        |
| Supplier                      | Bri-Chem Supply Corp, 5151 Bannock Street Unit 5, Denver, CO, 80216, 303-722-1681, <a href="http://www.brichemsupplycorp.com">www.brichemsupplycorp.com</a> |
| Emergency Contact Information | Chem Trek, (800) 424-9300, 24/7                                                                                                                             |

### 2. HAZARDS IDENTIFICATION

#### Potential Health Effects

|                                         |                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation                              | Can irritate the nose and throat.                                                                                                                                                                                                                                                                           |
| Skin Contact                            | Repeated or prolonged exposure can irritate or burn the skin.                                                                                                                                                                                                                                               |
| Eye Contact                             | CORROSIVE. EYE IRRITANT. May cause moderate to severe irritation.                                                                                                                                                                                                                                           |
| Ingestion                               | Symptoms may include nausea, vomiting, stomach cramps and diarrhea.                                                                                                                                                                                                                                         |
| Effects of Long-Term (Chronic) Exposure | Excessive, long term contact may produce "soda ulcers" on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure. This product does not contain any ingredient designated by IARC, NTP, ACHIH, or OSHA as probable or suspected human carcinogens. |

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name    | CAS Registry No. | Concentration % | Other Identifiers |
|------------------|------------------|-----------------|-------------------|
| Sodium carbonate | 497-19-8         | 99.8            |                   |

### 4. FIRST AID MEASURES

#### First Aid Procedures

|                    |                                                                                                                                                                                                                                                                     |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation         | Move victim to fresh air. Call a Poison Centre or doctor if the victim feels unwell.                                                                                                                                                                                |
| Skin Contact       | Immediately wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. If irritation or pain persists, see a doctor.                                                                                                   |
| Eye Contact        | Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. If irritation or pain persists, see a doctor. |
| Ingestion          | Have victim rinse mouth with water. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. DO NOT INDUCE VOMITING. Immediately call a Poison Centre or doctor.                                                    |
| Note to Physicians | 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.                                                      |

### 5. FIRE FIGHTING MEASURES

|                      |                |
|----------------------|----------------|
| Flammable Properties | Does not burn. |
|----------------------|----------------|

**Suitable Extinguishing Media** Not combustible. Use extinguishing agent suitable for surrounding fire.

**Specific Hazards Arising from the Chemical** Carbon dioxide.

**Protective Equipment and Precautions for Firefighters** Fight fire from a safe distance or a protected location. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Use the Personal Protective Equipment recommended in Section 8 of this MSDS.

**Environmental Precautions** It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

**Methods for Containment and Clean-up** This product, if spilled, can be recovered and re-used if contamination does not present a problem. Vacuum or sweep up the material. If the spilled product is unusable due to contamination, consult state or federal environmental agencies for acceptable disposal procedures and locations.

## 7. HANDLING AND STORAGE

**Handling** Only use where there is adequate ventilation. Avoid generating dusts. Prevent accidental contact with incompatible chemicals. Wear personal protective equipment to avoid direct contact with this chemical. Avoid repeated or prolonged skin contact with product or with contaminated equipment/surfaces.

**Storage** Store in an area that is: cool, dry, separate from incompatible materials (see Section 10: Stability and Reactivity). Prolonged storage may cause product to cake from atmospheric moisture.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guideline Comments** Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods. The following limits (OSHA and MSHA) apply to this material:

Particulates Not Otherwise Regulated:

OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits. 15 mg/m<sup>3</sup> (total dust)

Short-term TWA = Time-Weighted Average with specified time limit. 5 mg/m<sup>3</sup> (resp fraction).

**Engineering Controls** Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Eye wash facility should be provided in storage and general work area.

### Personal Protective Equipment (PPE)

**Eye/Face Protection** Do not get in eyes. Wear chemical safety goggles.

**Skin Protection** Wear chemical protective clothing e.g. gloves, aprons, boots.

**Respiratory Protection** Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.

**General Hygiene Considerations** It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|                                               |                        |
|-----------------------------------------------|------------------------|
| <b>Physical State</b>                         | Solid                  |
| <b>Appearance</b>                             | White powder.          |
| <b>Particle Size</b>                          | Not available          |
| <b>Odour</b>                                  | Odourless              |
| <b>Odour Threshold</b>                        | Not available          |
| <b>Molecular Formula</b>                      | Not applicable         |
| <b>Molecular Weight</b>                       | Not available          |
| <b>Boiling Point</b>                          | Not available          |
| <b>Decomposition Temperature</b>              | Not available          |
| <b>Melting Point</b>                          | 1569 °F (854 °C)       |
| <b>Freezing Point</b>                         | Not applicable         |
| <b>Relative Density (water = 1)</b>           | 2.533                  |
| <b>Bulk Density</b>                           | 0.00009 - 0.00110 kg/L |
| <b>Solubility in Water</b>                    | Slightly soluble.      |
| <b>Solubility in Other Liquids</b>            | Not applicable         |
| <b>pH</b>                                     | 11.3                   |
| <b>Partition Coefficient, n-Octanol/Water</b> | Not applicable         |
| <b>Viscosity-Kinematic</b>                    | Not applicable         |
| <b>Surface Tension</b>                        | Not applicable         |
| <b>Vapour Pressure</b>                        | Not applicable         |
| <b>Vapour Pressure at 50 deg C</b>            | Not applicable         |
| <b>Saturated Vapour Concentration</b>         | Not applicable         |
| <b>Critical Temperature</b>                   | Not applicable         |
| <b>Vapour Density (air = 1)</b>               | Not applicable         |
| <b>Evaporation Rate</b>                       | Not applicable         |
| <b>Flash Point</b>                            | Not applicable         |
| <b>Lower Flammable/Explosive Limit</b>        | Not applicable         |
| <b>Upper Flammable/Explosive Limit</b>        | Not applicable         |
| <b>Auto-ignition Temperature</b>              | Not applicable         |
| <b>Electrical Conductivity</b>                | Not applicable         |

## 10. STABILITY AND REACTIVITY

|                                           |                                                                                                                                                  |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chemical Stability</b>                 | Normally stable.                                                                                                                                 |
| <b>Conditions to Avoid</b>                | Contact with acids will release carbon dioxide, heat. Contact with lime dust in the presence of moisture can produce corrosive sodium hydroxide. |
| <b>Hazardous Decomposition Products</b>   | When heated to decomposition, carbon dioxide is released.                                                                                        |
| <b>Possibility of Hazardous Reactions</b> | Hazardous polymerization will not occur.                                                                                                         |

## 11. TOXICOLOGICAL INFORMATION

Inhalation 2 hour LC50 2.3 mg/l (rat)  
24 hour LC50 800 mg/m<sup>3</sup>, 20 h exposure (guinea pig) (moderate toxicity)

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Oral LD50 4,090 mg/kg (rat)

#### **Skin Irritation / Corrosion**

Animal tests show mild irritation.

500 mg/24hr (rabbit)

#### **Eye Irritation / Corrosion**

Animal tests show moderate or severe irritation.

50 mg (rabbit)

#### **Effects of Long-Term (Chronic) Exposure**

Excessive, long term contact may produce "soda ulcers" on hands and perforation of the nasal septum. Sensitivity reactions may occur from prolonged and repeated exposure.

#### **Respiratory and/or Skin Sensitization**

Not a skin sensitizer. (tested at 0.25% solution).

#### **Carcinogenicity**

IARC: Group 3 – Not classifiable as to its carcinogenicity to humans. ACGIH®: A4 – Not classifiable as a human carcinogen. NTP: Not specifically listed. OSHA: Not specifically listed.

No information was located for: Effects of Short-Term (Acute) Exposure, Teratogenicity / Embryotoxicity, Reproductive Toxicity, Mutagenicity, Toxicologically Synergistic Materials

## **12. ECOLOGICAL INFORMATION**

|                                       |                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b>                    | 96 hour LC50 265 - 565 mg/l (daphnia magna) (low toxicity)<br>300 - 320 mg/l (blue gill sunfish) (low toxicity)<br>96 hour TLm 1200 mg/l (mosquito fish)<br>48 hour TLm 840 mg/l (mosquito fish)<br>48 hour EC50 265 mg/l (daphnia magna)<br>5 day EC50 242 mg/l (Nitzscheria linearis)<br>7 day EC, biomass 14 mg/l (phytoplankton) |
| <b>Persistence and Degradability</b>  | Abiotic degradation:<br>Water (hydrolysis): degradation's products: carbonate (pH>10)/carbonic acid/carbon dioxide (pH<6)<br>Soil: Hydrolysis as a function of pH<br><br>Biotic degradation:<br>Aerobic/anaerobic: Not applicable (inorganic compound).                                                                              |
| <b>Bioaccumulation / Accumulation</b> | Not applicable (ionizable inorganic compound).                                                                                                                                                                                                                                                                                       |
| <b>Mobility</b>                       | Air: Not applicable<br>Water: Considerable solubility and mobility<br>Soil/Sediments: Non-significant absorption.                                                                                                                                                                                                                    |
| <b>Other Adverse Effects</b>          | Observed effects are related to alkaline properties of the product. Product is not significantly hazardous for the environment.                                                                                                                                                                                                      |

## **13. DISPOSAL CONSIDERATIONS**

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction.

## **14. TRANSPORT INFORMATION**

#### **Shipping Information**

Not regulated under Canadian TDG Regulations. Not regulated under US DOT Regulations.

#### **Other Transport Information**

|                         |                |
|-------------------------|----------------|
| <b>Special Shipping</b> | Not applicable |
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## 15. REGULATORY INFORMATION

### Canada

#### WHMIS Classification



Class D2B



Class E

D2B - Toxic; E - Corrosive

#### Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

### USA

#### US OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory. No other TSCA rules affect this product.

## 16. OTHER INFORMATION

**Date of Preparation** December 12, 2012

**Disclaimer** This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.

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