1. PRODUCT AND COMPANY IDENTIFICATION
   Product name: Sodium carbonate
   Product Number: 71347
   Brand: Sigma-Aldrich
   Supplier: Sigma-Aldrich
   Address: 3050 Spruce Street
   Phone: USA
   Telephone: +1 800-525-5832
   Fax: +1 800-325-5552
   Emergency Phone # (For both supplier and manufacturer): (314) 776-6555
   Preparation Information: Sigma-Aldrich Corporation
   Product Safety - Americas Region
   1-800-521-8956

2. HAZARDS IDENTIFICATION
   Emergency Overview
   OSHA Hazards
   Irritant
   GHS Classification
   Acute toxicity: Oral (Category 5)
   Skin irritation: Category 3
   Eye irritation: Category 2A
   GHS Label elements, including precautionary statements
   pictogram
   Signal word: Warning
   Hazard statement(s):
   H302: May be harmful if swallowed.
   H316: Causes mild skin irritation.
   H319: Causes serious eye irritation.
   Precautionary statement(s):
   P205 + P501 + P338: IF IN EYES; Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

3. COMPOSITION/INFORMATION ON INGREDIENTS
   Synonyms: Soda ash
   Formula: CNa2C3
   Molecular Weight: 105.69 g/mol
   Component
   Sodium carbonate
   CAS No.: 497-19-8
   EC-No.: 207-838-8
   Index-No.: 011-005-00-2
   Concentration: 90 - 100 %

4. FIRST AID MEASURES
   General advice
   Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
   In case of inhalation
   If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
   In case of skin contact
   Wash off with soap and plenty of water. Consult a physician.
   In case of eye contact
   Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
   If swallowed
   Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES
   Conditions of flammability
   Not flammable or combustible.
   Suitable extinguishing media
   Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
   Special protective equipment for firefighters
   Wear self-contained breathing apparatus for fire fighting if necessary.
   Hazardous combustion products
   Hazardous decomposition products formed under fire conditions. - Carbon oxides, Sodium oxides.

6. ACCIDENTAL RELEASE MEASURES
   Personal precautions
   Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.
   Environmental precautions
   Do not let product enter drains.
   Methods and materials for containment and cleaning up
   Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
   Precautions for safe handling
   Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.

**Conditions for safe storage**
Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Handle and store under inert gas. Keep in a dry place.

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## 9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

**Respiratory protection**
For nuisance exposures use type P95 (US) or type P1 (EU). For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 113) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Full contact**
- Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
- Material tested: DermABILITY (KCL 740 / Aldrich Z67277, Size M)
- Splash contact
  - Material: Nitrile rubber
  - Minimum layer thickness: 0.11 mm
  - Break through time: 480 min
- Material tested: DermABILITY (KCL 740 / Aldrich Z67277, Size M)

**Data source:** KCL GmbH, D-38124 Ehrenstein, phone +49 (0)6559 87200, e-mail sales@kcl.de, test method: EN374. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Eye protection**
Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

**Skin and body protection**
Impervious clothing. - The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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## 10. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

- **Form:** Powder
- **Colour:** White

### Safety data

- **pH:** 12 at 106 g/l at 25 °C (77 °F)
- **Melting point/range:** 851 °C (1,544 °F)
- **Boiling point:** No data available

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## 11. STABILITY AND REACTIVITY

**Chemical stability**
Hygroscopic. Stable under recommended storage conditions.

**Possibility of hazardous reactions**
No data available.

**Conditions to avoid**
Exposure to moisture.

**Materials to avoid**
Strong acids.

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions: - Carbon oxides, Sodium oxides

**Other decomposition products**
No data available.

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## 12. TOXICOLOGICAL INFORMATION

**Acute toxicity**
- **Oral LD50:**
  - Rat - 4,090 mg/kg
- **Inhalation LC50:**
  - Rat - 2 h - 6,570 mg/m³
- **Dermal LD50:**
  - No data available

**Other information on acute toxicity**
No data available.

**Skin corrosion/irritation**
Skin - rabbit - Mild skin irritation - 24 h

**Serious eye damage/eye irritation**
Eyes - rabbit - Eye irritation - 24 h

**Respiratory or skin sensitization**
No data available.

**Gerard cell mutagenicity**
No data available.
12. ECOLOGICAL INFORMATION

Toxicity
- Toxicity to fish: LC50 - Lepomis macrochirus (Bluegill) - 360 mg/L - 96 h
- Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna (Water flea) - 285 mg/L - 48 h

Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available

PBT and vPvB assessment: no data available

13. DISPOSAL CONSIDERATIONS

Disposal
- Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
- Not dangerous goods

IMDG
- Not dangerous goods

IATA
- Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards
- Initant

SARA 302 Components
- SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
- SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
- Acute Health Hazard

Massachusetts Right To Know Components
- No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
- Sodium carbonate: CAS-No. 497-19-8
- New Jersey Right To Know Components
- California Prop. 65 Components
- This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

16. OTHER INFORMATION

Further Information
- Copyright 2013 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.
- The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.