



The Science Company®

MSDS

Material Safety Data Sheet

1. PRODUCT and COMPANY IDENTIFICATION

Product: Sodium Carbonate

Product Code(s): NC-1687, S1103, CF1096

Synonyms: Soda Ash; Disodium Carbonate;
Carbonic acid, Disodium Salt;

Manufacturer: The Science Company

95 Lincoln St, Denver, CO 80203

Ph: (303)777-3777 Fax: (303)777-3331

**IN CASE OF EMERGENCY
24 HOUR CONTACT TELEPHONE
CHEM-TEL: (800)255-3924**

All non-emergency questions may be directed to customer service (303)777-3777

2. COMPOSITION and INFORMATION on INGREDIENTS

<u>Ingredients</u>	<u>CAS#</u>	<u>Chemical Formula</u>	<u>Formula Weight</u>	<u>Hazardous</u>	<u>% by Weight</u>
Sodium Carbonate	497-19-8	Na ₂ CO ₃	105.99	No	>99.5

3. HAZARDS IDENTIFICATION

Emergency Overview:

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, RESPIRATORY TRACT, AND/OR GASTROINTESTINAL TRACT. MAY BE HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.

SAFETY RATINGS: Health: 2, Moderate
Flammability: 0, None
Reactivity: 1, Slight
Contact: 2, Moderate

Protective Equipment: Safety glasses, lab coat or apron, gloves

Storage Code: Green: General

Potential Health Effects:

INHALATION:

Inhalation of dust may cause irritation to the respiratory tract. Symptoms may include coughing and difficult breathing. Excessive contact is known to cause damage to the nasal septum.

INGESTION:

May be corrosive to the gastro-intestinal tract where symptoms may include severe abdominal pain, vomiting, diarrhea, collapse and in severe cases, death.

SKIN CONTACT:

Causes irritation or burns to skin. Symptoms include redness, itching, blistering, inflammation, and pain.

EYE CONTACT:

Causes irritation or burns, redness, and pain. May cause conjunctival edema and corneal destruction. Other symptoms may appear from absorption of sodium carbonate into the bloodstream via the eyes.

POTENTIAL CHRONIC HEALTH EFFECTS:

Prolonged or repeated exposure may produce target organ damage and cause skin sensitization.

MEDICAL CONDITIONS GENERALLY AGGRAVATED by EXPOSURE:

No information found.

4. FIRST AID MEASURES

INHALATION:

If inhaled, remove to fresh air. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Get medical attention.

INGESTION:

If swallowed, DO NOT INDUCE VOMITING. Give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

SKIN CONTACT:

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.

EYE CONTACT:

Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.

5. FIRE FIGHTING MEASURES

NFPA RATINGS: Health: 2 Flammability: 0 Reactivity: 1

FIRE:

Not considered to be a fire hazard, however, sodium carbonate can ignite and burn fiercely in contact with fluoride. Sodium Carbonate in contact with fluorine decomposed at ordinary temperature with incandescence.

EXPLOSION:

Not considered to be an explosion hazard, however, may explode when applied to red hot aluminum. Sodium carbonate + ammonia in arabic gum solution will explode.

FIRE EXTINGUISHING MEDIA:

Use any means suitable for extinguishing surrounding fire.

SPECIAL INFORMATION:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of leak or spill. Isolate area of leak or spill. Wear appropriate personal protective equipment as specified in the Exposure Control and Personal Protection Section 8. Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust. If necessary: **Neutralize the residue with a dilute solution of acetic acid.**

7. HANDLING and STORAGE

Store in a cool, dry, ventilated area. Keep containers tightly closed and upright. Protect from physical damage. Containers of this material may be hazardous when empty since they retain product residues (dust, solids). Observe all warnings and precautions listed for the product. Storage and use areas should be non-smoking. Wash thoroughly after handling. Hygroscopic.

8. EXPOSURE CONTROL and PERSONAL PROTECTION

AIRBORNE EXPOSURE LIMITS:

None established

VENTILATION SYSTEM:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

PERSONAL RESPIRATORS (NIOSH) APPROVED:

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

SKIN PROTECTION:

Wear protective clothing, gloves, lab coat or apron, as appropriate, to prevent skin contact.

EYE PROTECTION:

Use chemical safety glasses/goggles and/or a full face shield. Maintain eye wash fountain and quick drench facilities in work area.

9. PHYSICAL and CHEMICAL PROPERTIES

APPEARANCE:	White powder or granules
ODOR:	Odorless
SOLUBILITY IN WATER:	6% (0°C); 8.5% (10°C); 17% (20°C); 28% (30°C); 45.5% (100°C)
SPECIFIC GRAVITY:	2.53
pH:	11.5 (1% solution in water)
% VOLATILES by VOLUME:	0
BOILING POINT:	Decomposes
MELTING POINT:	851°C (1564°F)
VAPOR DENSITY (Air =1):	No information found
VAPOR PRESSURE (mm Hg):	Not applicable
EVAPORATION RATE (BuAc=1):	No information found

10. STABILITY and REACTIVITY

STABILITY:

Stable under ordinary conditions of use and storage. Hygroscopic. Readily absorbs moisture from air with evolution of heat.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon and sodium oxide.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

Fluorine, fluoride, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, ammonia + silver nitrate, moisture, calcium hydroxide, ammonia, acids, sodium sulfide, hydrogen peroxide, red hot aluminum metal, and 2,4,6-trinitrotoluene. Reacts violently with acids to form carbon dioxide. Reacts violently with F2, Lithium, and 2,4,6-trinitrotoluene.

CONDITIONS to AVOID:

Moisture, heat, and incompatibles

11. TOXICOLOGICAL INFORMATION**TOXICOLOGICAL DATA:**

Oral rat LD50: 4090 mg/kg
 Inhalation rat LC50: 2300 mg/m3 (2 hours)
 Oral human LDL: 714 mg/kg

CHRONIC HEALTH EFFECTS:

-May effect genetic material (mutagen)
 -May cause adverse reproductive effects based on animal test data
 -Chronic exposure may result in decreased pulmonary function, nasal congestion, nosebleeds, perforation of the nasal septum

CARCINOGENIC EFFECTS:

Not known to cause cancer

12. ECOLOGICAL INFORMATION**ENVIRONMENTAL FATE:**

No information found

ENVIRONMENTAL TOXICITY:

96 Hr LC50 Lepomis macrochirus: 300 mg/L [static];
 48 Hr EC50 Daphnia magna: 265 mg/L

13. DISPOSAL INFORMATION

Whatever cannot be saved for recovery or recycling should be disposed of or incinerated at an approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION**TRANSPORT (Land, DOT):**

Not regulated

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: U.S. EPA TSCA 8(b) Inventory: Sodium Carbonate

US EPCRA (SARA Title III) Sections 311/312:

<u>Hazard Categories</u>	<u>List (Yes/No)</u>
Section 311 – Hazardous Chemical	No
Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No

INVENTORY STATUS:

<u>Country(s) or Region</u>	<u>Inventory Name</u>	<u>On Inventory (Yes/No)*</u>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes

Sodium Carbonate MSDS

Effective Date: 11/29/2010

New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

PRODUCT USE:

Laboratory Reagent.

The Science Company provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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