

**MSDS Name:** Sodium Carbonate

◆ **Chemical Products & Company Identification**

**MSDS Name:** Sodium Carbonate

**CAS #** 497-19-8

**Hazard Symbols:** X1

**Risk Phrases:** R 36 irritating to eyes

**Product Name:** Sodium Carbonate

**Synonym:** Bisodium Carbonate, Calcined Soda, Carbonic Acid, Disodium salt, Chrystal Carbonate, Soda, Soda Ash, Soda Monohydrate, Sodium Carbonate, Monohydrate, Solvay Soda, ... **Physical**

**State:** Powder, White Crystalline Powder

**Molecular Formula:**

**Structure Formula:** .

**Molecular Weight:** 105.99

**Color:** White

**Odor:** Odorless

**Melting Point:** 851

**Solubility in Water:** 17 ~ 33 g / 100 ml water (20 °C)

**Bulk Density:** 0.9 ~ 1 g/cc

**Specific Gravity / Density:** 2.5320 g/cm<sup>3</sup>

**Uses:** Oxidation & Bleaching agent used in the textile, detergent, pharmaceutical & Cosmetic Industry.

**Hazard Identification**

**Inhalation:** May cause respiratory tract irritation such as coughing & Sneezing.

◆ **Ingestion:** May cause irritation of the digestive tract (Extremely large oral doses may cause gastrointestinal disturbances.)

**Skin Contact:** May cause skin irritation but no adverse effects expected.

**Eyes Contact:** May mild irritation, redness, watering & pain. **Chronic**

**Exposure:** No information found.

### ◆ First Aid Measures

**Swallow:** harmful if swallowed. May cause irritation. Avoid breathing vapors or dusts. Use with adequate ventilation. Avoid contact with eyes, skin & clothes. Wash thoroughly after handling. Keep container closed.

**Eyes:** Wash eyes with plenty of water for at least 15 minutes. Lifting lids occasionally. Seek medical aid immediately.

**Skin:** Wash skin with soap & water. Remove contaminated clothing & wash before re-use. If irritation persists seek medical advice immediately.

**Inhalation:** If breathing is difficult, give oxygen, get medical aid if cough or other symptoms appear.

### ◆ Fire Fighting Measures

**Wear Self:** Contained breathing apparatus & protective clothing to prevent contact with skin & clothing.

Use agent most appropriate to extinguish surrounding fire.

### Accident Release Measures

**General Information:** Use proper personal protective equipment such as:



## Soda Ash – MSDS

- ◆ **Eyes:** Wear appropriate protective eye glasses or chemical safety goggles as described by OHSAS eye & face protection regulations.
- ◆ **Skin:** Wear appropriate protective gloves to prevent skin exposure.
- ◆ **Clothing:** Wear appropriate protective clothing to prevent skin exposure.
- ◆ **Respirators:** Follow the OSHA respirator regulations.

### ◆ Handling & Storage

**Handling:** Use with adequate ventilation. Minimize dust generation & accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

**Storage:** Store in cool place out of direct sunlight, store in well ventilated area. Store away from incompatible substances such as acids, alkalis, reducing agents, oxidizing agents, rust (transition) metals & their compounds (such as iron, copper, brass, bronze, cobalt, nickel and lead) as well as organic & combustible material. Maximum product storage temperature is in 35 . Product is stable under this temperature. Store in a tightly closed container. Avoid exposure to moisture, direct sun light or sources of heat & contamination. Do not return unused product to original container. Do not allow dust to accumulate.

### ◆ Exposure Controls / Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility & safety shower. Use adequate ventilation to keep air borne concentrations low.

### Personal Protective Equipment



## Soda Ash – MSDS

- ◆ **Eyes:** Wear chemical goggles and face shield.
- Skin:** Wear appropriate protective gloves and clothing to minimize skin exposure.
- Clothing:** Wear appropriate protective clothing to minimize contact with skin.
- Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

### ◆ Stability & Reactivity

**Chemical Stability:** Stable at room temperature in closed container under normal storage & handling conditions.

Decomposed by acids with effervescence, evolution of carbon dioxide.

**Conditions To Avoid:** Incompatible materials, dust generation, excess heat, temperature above 300 , exposure to moist air or water.

**In Compatibilities with Other Materials:** Reacts explosively with red – hot aluminum metal. Incompatible with ammonia + silver nitrate, 2, 4 dinitrotoluene, 2, 4, 6 trinitrotoluene, sulfuric acid, sodium sulfide + water, lithium, phosphorus pent oxide & hydrogen peroxide. Hot concentrated of sodium carbonate are mildly corrosive to steel. Simultaneous exposure of soda ash & lime dusts in the presence of moisture can result in the formation of corrosive caustic soda which may cause burns.

**Hazardous Decomposition Products:** Carbon dioxide, carbon monoxide, toxic fumes of sodium oxide.

**Hazardous Polymerization:** Has not been reported.

### Ecological Information

- ◆ Chemical Waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

#### ◆ **Transport Information**

No special regulation. Non-hazardous for air, sea and road freight.

