



NIRMA LIMITED

Plant: Chemical Complex, Village-Kalatalav, Tal. Bhavnagar, Dist. Bhavnagar 364313
Ph.: 0278-2885301-3 Fax: 0278-2413826

SODIUM CARBONATE

MSDS Number: S3242

1. Product Identification

Synonyms: Carbonic acid, disodium salt; disodium carbonate; soda ash

CAS No.: 497-19-8

Molecular Weight: 105.99

Chemical Formula: Na₂CO₃

Product Codes:

J.T. Baker: 3602, 3604, 3605, 4502, 4923, 5198, 5834

Mallinckrodt: 1338, 7468, 7521, 7527, 7528, 7698

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Sodium Carbonate	497-19-8	99 - 100%

3. Hazards Identification

3.1 Classification of the substance or mixture:

3.1.1 Classification according to Regulation EC No 1272/2008

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Eye Irrit.	category 2	H319: Causes serious eye irritation.



Dr KC Pathak
AGM - Quality Assurance (Ph No: 8980026334)

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3.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC
Xi; R36 - Irritating to eyes.

3.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Pictogram



Signal word

Warning

H-statements

H319

Causes serious eye irritation.

P-statements

P280

Wear eye protection/face protection.

P264

Wash hands thoroughly after handling.

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.

Emergency Overview

**DANGER! MAY CAUSE EYE BURNS. HARMFUL IF SWALLOWED OR INHALED.
CAUSES IRRITATION TO SKIN AND RESPIRATORY TRACT.**



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J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 1 - Slight

Flammability Rating: 0 - None

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation:

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

Ingestion:

Sodium carbonate is only slightly toxic, but large doses may be corrosive to the gastro-intestinal tract where symptoms may include severe abdominal pain, vomiting, diarrhea, collapse and death.

Skin Contact:

Excessive contact may cause irritation with blistering and redness. Solutions may cause severe irritation or burns.

Eye Contact:

Contact may be corrosive to eyes and cause conjunctival edema and corneal destruction. Risk of serious injury increases if eyes are kept tightly closed. Other symptoms may appear from absorption of sodium carbonate into the bloodstream via the eyes.

Chronic Exposure:

Prolonged or repeated skin exposure may cause sensitization.

Aggravation of Pre-existing Conditions:

No information found.



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4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion:

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

Skin Contact:

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

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician:

Consider endoscopy in all suspected cases of sodium carbonate poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

5. Fire Fighting Measures

Fire:

Not considered to be a fire hazard.

Explosion:

Not considered an explosion hazard, but sodium carbonate may explode when applied to red-hot aluminum.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

Use protective clothing and breathing equipment appropriate for the surrounding fire.



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6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. 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.

8. Exposure Controls/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. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. 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 gloves and clean body-covering clothing.



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Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White powder or granules.

Odor:

Odorless.

Solubility:

45.5 g/100 ml water @ 100C (212F)

Specific Gravity:

2.53

pH:

11.6 Aqueous solution

% Volatiles by volume @ 21C (70F):

0

Boiling Point:

Decomposes.

Melting Point:

851C (1564F)

Vapor Density (Air=1):

No information found.

Vapor Pressure (mm Hg):

No information found.

Evaporation Rate (BuAc=1):

No information found.



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10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Hygroscopic. Readily absorbs moisture from the air. Solutions are strong bases.

Hazardous Decomposition Products:

Oxides of carbon and sodium oxide.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Fluorine, aluminum, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6-trinitrotoluene. Reacts violently with acids to form carbon dioxide.

Conditions to Avoid:

Moisture, heat, dusting and incompatibles.

11. Toxicological Information

For Sodium Carbonate:

Oral rat LD50: 4090 mg/kg; inhalation rat LC50: 2300 mg/m³/2H; irritation eye rabbit: 50 mg severe; investigated as a mutagen, reproductive effector.

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Sodium Carbonate (497-19-8)	No	No	None

12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.



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13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and 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

Land transport
USDOT Not classified as a dangerous good under transport regulations
Sea transport
IMDG Not classified as a dangerous good under transport regulations
Air transport
IATA/ICAO Not classified as a dangerous good under transport regulations

15. Regulatory Information

Table with 5 columns: Ingredient, TSCA, EC, Japan, Australia. Row: Sodium Carbonate (497-19-8)

Table with 5 columns: Ingredient, Korea, DSL, NDSL, Phil. Row: Sodium Carbonate (497-19-8)

Table with 5 columns: Ingredient, RQ, TPQ, List, Chemical Catg. Row: Sodium Carbonate (497-19-8)

Table with 4 columns: Ingredient, CERCLA, RCRA-261.33, TSCA-8(d). Row: Sodium Carbonate (497-19-8)

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No
Reactivity: No (Pure / Solid)



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16. Other Information

Information based on classification according to CLP

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Enumerated in substance list Annex I of Directive 67/548/EEC et sequens

Labels



Irritant

R-phrases

36 Irritating to eyes

S-phrases

(02) (Keep out of the reach of children)

22 Do not breathe dust

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Full text of any R-phrases referred to under headings 2 and 3:

R36 Irritating to eyes

Full text of any H-statements referred to under headings 2 and 3:

H319 Causes serious eye irritation.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bio accumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labeling and packaging (Globally Harmonized System in Europe)

NFPA Ratings: Health: **2** Flammability: **0** Reactivity: **0**

Label Hazard Warning:

DANGER! MAY CAUSE EYE BURNS. HARMFUL IF SWALLOWED OR INHALED. CAUSES



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IRRITATION TO SKIN AND RESPIRATORY TRACT.

Label Precautions:

Do not get in eyes, on skin, or on clothing.

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Wash thoroughly after handling.

Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In all cases, get medical attention.

Product Use:

Commercial Use.

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the license and liability limiting conditions as stated in your BIG license agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.



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