

SAFETY DATA SHEET
Sodium Carbonate, Anhydrous

SDS # : 497-19-8
Revision date: 2015-04-30
Format: NA
Version 5.01



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Soda Ash

Other means of identification

Product Code(s) 497-19-8

Synonyms Sodium carbonate, anhydrous; Carbonic acid, disodium salt; Disodium carbonate

Chemical Family Alkali salt

Recommended use of the chemical and restrictions on use

Recommended Use: Glass manufacture , Personal care, Detergent, Water treatment chemical, Chemical processing

Restrictions on Use: See section 16 for more information

Manufacturer Address

Tronox Alkali Wyoming Corporation
1735 Market Street
Philadelphia, PA 19103
Tel: +1 877-362-2248 or +1 215-299-6904
www.tronox.com

Emergency telephone number

1 307 / 872 2452 (Plant - Green River, WY)
1 303/ 389-1409 (Medical - U.S. - Call Collect)

For leak, fire, spill or accident emergencies, call:
1 800 / 424 9300 (CHEMTREC - U.S.A.)
1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

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

| | |
|-----------------------------------|------------|
| Serious eye damage/eye irritation | Category 2 |
|-----------------------------------|------------|

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Warning**Hazard Statements**

H319 - Causes serious eye irritation

**Precautionary Statements - Prevention**

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

Precautionary Statements - Response

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

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Alkali salt.
Formula Na₂CO₃

| Chemical name | CAS-No | Weight % |
|------------------|----------|----------|
| Sodium carbonate | 497-19-8 | 100 |

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact

Wash off with warm water and soap. Get medical attention if irritation develops and persists. Remove and wash contaminated clothing before re-use.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention.

| | |
|---|---|
| Ingestion | Never give anything by mouth to an unconscious person Get medical attention if symptoms occur |
| Most important symptoms and effects, both acute and delayed | Causes serious eye damage / eye irritation. |
| Indication of immediate medical attention and special treatment needed, if necessary | Treat symptomatically. |

5. FIRE-FIGHTING MEASURES

| | |
|--|--|
| Suitable Extinguishing Media | Use extinguishing agent suitable for type of surrounding fire. |
| Specific Hazards Arising from the Chemical | Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes |
| Hazardous Combustion Products | Fumes of sodium oxide. Carbon oxides (COx). |
| <u>Explosion data</u> | |
| Sensitivity to Mechanical Impact | Not sensitive. |
| Sensitivity to Static Discharge | Not sensitive. |
| Protective equipment and precautions for firefighters | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. |

6. ACCIDENTAL RELEASE MEASURES

| | |
|----------------------------------|--|
| Personal Precautions | Avoid dust formation. Sweep up to prevent slipping hazard. |
| Other | For further clean-up instructions, call Emergency Hotline number listed in Section 1 "Product and Company Identification" above. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. |
| Methods for Containment | Prevent large quantities of this product from contacting vegetation or waterways. Cover with plastic sheet to prevent spreading. Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. |
| Methods for cleaning up | Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Dispose of waste as indicated in Section 13. |

7. HANDLING AND STORAGE

| | |
|------------------------------|--|
| Handling | Use air conveying/mechanical systems for bulk transfer to storage. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected. |
| Storage | Store in original container. Keep in properly labeled containers. Keep container tightly closed. |
| Incompatible products | Aluminium. Powdered aluminum. Acids |

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply

Appropriate engineering controls

Engineering measures Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Skin and Body Protection Wear suitable protective clothing. Protective shoes or boots.

Hand Protection Nitrile rubber, Neoprene gloves

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

General information These recommendations apply to the product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | |
|-------------------------------------|--|
| Appearance | Granules |
| Physical State | Solid |
| Color | White |
| Odor | odorless |
| Odor threshold | Not applicable |
| pH | 11.4 (1% solution in water) |
| Melting point/freezing point | 851 °C |
| Boiling Point/Range | No information available |
| Flash point | Not applicable |
| Evaporation Rate | No information available |
| Flammability (solid, gas) | Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes |
| Flammability Limit in Air | |
| Upper flammability limit: | No information available |
| Lower flammability limit: | No information available |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Density | No information available |
| Specific gravity | 2.52 |
| Water solubility | 212.5 g/L @ 20 °C |
| Solubility in other solvents | No information available |
| Partition coefficient | No information available |
| Autoignition temperature | No information available |
| Decomposition temperature | 400 °C |
| Viscosity, kinematic | No information available |
| Viscosity, dynamic | No information available |
| Explosive properties | Not explosive |
| Oxidizing properties | Non-oxidizing |
| Molecular weight | 105.99 |
| Bulk density | 0.86 - 1.12 g/cm ³ (Dense grades) 0.70 - 0.90 g/cm ³ (Light Grades) |
| K_{st} | 0 bar m/s |

10. STABILITY AND REACTIVITY

Reactivity None under normal use conditions.

Chemical Stability Stable. Decomposes by reaction with strong acid.

Possibility of Hazardous Reactions None under normal processing.

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Hazardous polymerization Hazardous polymerization does not occur.
Conditions to avoid Exposure to air or moisture over prolonged periods.
Incompatible materials Aluminium. Powdered aluminum. Acids.
Hazardous Decomposition Products Sodium oxides. Carbon oxides (COx).

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 2,800 mg/kg (rat)
LD50 Dermal > 2,000 mg/kg (rabbit)
LC50 Inhalation 2.3 mg/L (rat)
Eye Contact Irritating to eyes.
Skin Contact Non-irritating
Sensitization Patch test on human volunteers did not demonstrate sensitization properties.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity No known effect.
Mutagenicity No information available
Carcinogenicity Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Reproductive toxicity No information available.
STOT - single exposure No information available.
STOT - repeated exposure No information available.
Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

| Sodium carbonate (497-19-8) | | | | |
|-----------------------------|-----------|------------------|---------|-------|
| Active Ingredient(s) | Duration | Species | Value | Units |
| Sodium Carbonate | 96 h LC50 | Bluegill sunfish | 300 | mg/L |
| Sodium Carbonate | 48 h EC50 | Ceriodaphnia | 200-227 | mg/L |

Persistence and degradability Biodegradability does not pertain to inorganic substances.
Bioaccumulation Does not bioaccumulate.
Mobility Dissociates into ions.
Other Adverse Effects None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT NOT REGULATED
TDG NOT REGULATED
ICAO/IATA NOT REGULATED
IMDG/IMO NOT REGULATED

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|-----|
| Acute health hazard | Yes |
| Chronic health hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

International Inventories

| Component | TSCA (United States) | DSL (Canada) | EINECS/ELI NCS (Europe) | ENCS (Japan) | China (IECSC) | KECL (Korea) | PICCS (Philippines) | AICS (Australia) |
|--------------------------------------|-------------------------|-----------------|-------------------------------|-----------------|------------------|-----------------|------------------------|---------------------|
| Sodium carbonate 497-19-8 (100) | X | X | X | X | X | X | X | X |

Mexico - Grade Moderate risk, Grade 2

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WHMIS Hazard Class

D2B - Toxic materials, Eye irritation
Class E : Corrosive to aluminum. Not corrosive to animal skin or carbon steel.



D2B - Toxic



E - Corrosive

16. OTHER INFORMATION

| | | | | |
|------|------------------|----------------|-------------------|-----------------------|
| NFPA | Health Hazards 2 | Flammability 0 | Instability 0 | Special Hazards - |
| HMIS | Health Hazards 2 | Flammability 0 | Physical hazard 0 | Personal Protection X |

NFPA/HMIS Ratings Legend Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications

This product meets the chemical testing specifications defined in the Food Chemicals Codex (FCC), 8th Edition.

This product is certified to NSF/ANSI Standard 60 for use in drinking water treatment at the specified maximum use limit. The MUL (maximum use level) for sodium carbonate, anhydrous is 150 mg/L under NSF/ANSI Standard 60.



OU Kosher Certification



Certified to
NSF/ANSI 60



American Water Works Association

Revision date: 2015-04-30
Revision note: Minor change

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End of Safety Data Sheet