

Safety Data Sheet

Sodium Carbonate



This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and based upon Regulation (EC) No. 1907/2006, as amended by Regulation (EC) No. 453/2010

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier:		
Product Name	Sodium Carbonate, Anhydrous	
Synonyms	Soda Ash, Disodium Carbonate, Carbonic Acid, Disodium Salt,	
Chemical Formula	Na ₂ CO ₃	
Molecular Weight	105.99	
CAS Number	497-19-8	
EC Index Number	011-005-00-2	
RTECS Number	VZ4050000	
Registration Number REACH	01-2119485498-19-0011	
Product Type REACH	Substance/mono-constituent	
1.2 Relevant Identified Uses Of The Substance Or Mixture And Uses Advised Against:		
Relevant Identified Uses	Glass manufacturing, chemical manufacturing, pulp and paper, water treatment and pH control, soap and detergent manufacturing, coal treatment, emission control, ion exchange resin regeneration, chemical processing	
Uses Advised Against	No uses advised against known	
Manufacturer(s)	Ciner Resources Corporation Five Concourse Parkway Atlanta, Georgia 30328 USA	Tata Chemicals North America 100 Enterprise Drive Rockaway, New Jersey 07866 USA
	Genesis Alkali 1735 Market Street Philadelphia, Pennsylvania 19103 USA	Solvay Minerals 3737 Buffalo Speedway, Suite 800 Houston, Texas 77098 USA
Emergency Telephone Numbers	For emergencies involving a spill, leak, fire or exposure, contact: » United States.....CHEMTREC..... (800) 424-9300 » Canada.....CANUTEC..... (613) 996-6666	
General or Product Information	American Natural Soda Ash Corporation (203) 226-9056	

SECTION 2. Hazards Identification

2.1 Classification of the substance:

Regulation EC No 1272/2008, OSHA Hazard Communication Standard (29 CFR 1910.1200)

Class	Category	Hazard Statement
Eye Irritant	Category 2	H319: Causes serious eye irritation

2.2 Label elements:

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



	Number	Statement
Signal Word		Warning
Hazard Statement	H319	Causes Serious Eye Irritation
Precautionary Statement- Prevention	P264	Wash face, hands and any exposed skin thoroughly after handling
Precautionary Statement-Prevention	P280	Wear eye protection/face protection
Precautionary Statement-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
Precautionary Statement-Response	P337+ P313	If eye irritation persists: Get medical advice/attention

2.3 Hazards not otherwise classified (HNOC):

No hazards not otherwise classified were identified.

SECTION 3. Composition/Information on Ingredients

3.1 Substances:

Chemical Family: Alkali Salt

Formula: Na₂CO₃

Materials	CAS #	EINECS Number	Conc. (C)	EC Class	CLP Class	Note
Sodium Carbonate	497-19-8	207-838-8	C>99.2%	Xi; R36	Eye Irrit; H319	(1)

(1) For R-phases and H-statements in full see heading 16

3.2 Mixtures:

Not Applicable

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Eye Exposure

- Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes
- Seek immediate medical attention

Skin Exposure

- In case of contact, immediately wash with plenty of soap and water
- See medical attention if irritation develops or persists
- Remove contaminated clothing and shoes
- Clean contaminated clothing and shoes before re-use

Inhalation

- Remove to fresh air.
- If breathing difficulty or discomfort occurs and persists, seek medical attention

Ingestion

- If conscious and alert, give 1-2 glasses of water to drink
- Do not give anything by mouth to an unconscious person
- Do not induce vomiting
- If feeling unwell seek medical attention

4.2 Most important symptoms and effects, both acute and delayed:

After Eye Exposure

- Irritation of the eye tissue. Lacrimation

After Skin Exposure

- Not irritating

After Inhalation

- AFTER INHALATION OF DUST: Dry/sore throat. Coughing. Slight irritation.
- EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Respiratory difficulties.

Ingestion

- AFTER ABSORPTION OF HIGH QUANTITIES: Nausea. Abdominal pain. Irritation of the gastric/intestinal mucosa.

4.3 Indication of any immediate medical attention and special treatment needed:

Treat symptomatically

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

5.1.1 Suitable Extinguishing Media:

Adapt extinguishing media to the environment

5.1.2 Unsuitable Extinguishing Media:

No unsuitable extinguishing media known

5.2 Special hazards arising from the substance or mixture:

Upon combustion: Carbon oxides (CO_x) can form. Reacts on exposure to water (moisture) with (some) metals.

5.3 Advice for firefighters:

5.3.1 Instructions:

No specific fire-fighting instructions required

5.3.2 Special protective equipment for fire-fighters:

Standard firefighting gear: Gloves, helmet, eye protection (safety glasses or face guard), protective clothing, protective boots, compressed air/oxygen apparatus

Other Information:

Type:	Comment
Flammable Limits	Not applicable
Auto Ignition Temperature	Not applicable
Sensitivity To Mechanical Impact	Not sensitive
Sensitivity to Static Discharge	Not sensitive
Hazardous Combustion Products	Carbon Oxides (CO _x)

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Prevent dust cloud formation either by sweeping up or, if needed wetting down.

Sweep up to prevent slipping hazard.

6.1.1 Protective equipment for non-emergency personnel

Refer to Section 8

6.1.2 Protective equipment for emergency responders

Gloves, Safety Glasses, Protective Clothing. If dust cloud is present: compressed air/oxygen apparatus. Refer to Section 8

6.2 Environmental precautions:

Do not flush into surface water or sanitary sewer system. Prevent large quantities of this product from contacting vegetation or waterways; large spills could kill vegetation and fish.

6.3 Methods and material for containment and cleaning up:

Scoop solid spill into properly labeled closed containers. Clean contaminated surfaces with an excess of water. Store labeled closed containers in a suitable place until transfer for disposal. Refer to Section 13

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

- Keep away from naked flames/heat
- Use air conveying/mechanical systems for bulk transfer to storage.
- Avoid raising dust
- 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

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

- For bulk store in a cool, dry area
- For containers, keep in a well-ventilated area, and product should be stored in its original labelled packaging and tightly closed
- Keep product out of direct sunlight
- Store product so it meets all legal requirements

7.2.2 Keep away from:

- Heat source
- (Strong) acids
- Water/moisture
- Some metals (Aluminum, Zinc)
- Lime dust and moisture [could form caustic soda (NaOH) and cause burns]

7.2.3 Suitable packaging material:

No data available (most packaging materials are acceptable except noted in 7.2.4 and where local laws supersedes the SDS)

7.2.4 Non suitable packaging material:

- Aluminum
- Zinc

SECTION 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 Control parameters:

Exposure Guidelines: Federal guidelines treat the ingredient(s) in this product as a nuisance dust, as no product-specific guidelines have been issued for exposure. As with all nuisance dusts, worker breathing zone concentrations should be measured by validated sampling and analytical methods. The following limits (OSHA and MSHA) apply to this material:

Method	Total Dust	RASP Fraction
OSHA (PEL/TWA)	10 mg/m ³	5 mg/m ³
MSHA (PEL/TWA)	10 mg/m ³	N/A

8.2 Exposure controls:

The information in this section is a general description, exposure scenarios should be developed for the specific facilities

8.2.1 Appropriate engineering controls

- Avoid raising dust
- Carry operations in the open/under local exhaust/ventilation or with respiratory protection
- Eye wash facility should be provided in storage and general work area

8.2.2 Individual protection measures, such as personal protective equipment

Area of Protection	Recommend Equipment*
Eye/Face	Tightly fitting safety goggles
Skin and Body	Wear suitable protective clothing, Protective shoes or boots
Hands	Nitrile rubber, Neoprene gloves
Respiratory	In case of inadequate ventilation wear respiratory protection
Hygiene	Handle in accordance with good industrial hygiene and safety practice

***These recommendations apply to the product as supplied**

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical properties here represent typical properties of this product. Contact the business area using the Product Information phone number in Section 1 for its exact specifications.

Appearance	Granules
Physical State	Solid
Color	White
Odor	Odorless
Odor threshold	Not applicable
pH	11.4 (1% solution in water)
Melting point	851 °C
Boiling Point/Range	No information available
Flash point	Not required: exemption according to REACH
Evaporation rate	Not applicable
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	Not required: exemption according to REACH
Vapor density	Not applicable
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
Formula	Na ₂ CO ₃
Bulk density	0.86 – 1.12 g/cm ³ (Dense grades) 0.70 – 0.90 g/cm ³ (Light grades)

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

None under normal use conditions

10.2 Chemical stability:

Hygroscopic

10.3 Possibility of hazardous reactions:

Reacts on exposure to water (moisture) with (some) metals. Violent exothermic reaction with (some) metals. Reacts with (strong) oxidizers.

10.4 Conditions to avoid:

Avoid raising dust. Keep away from naked flames/heat. Avoid exposure to moisture over prolonged periods.

10.5 Incompatible materials:

Aluminum, Powdered aluminum, (strong) acids, zinc

10.6 Hazardous decomposition products:Sodium oxides. Carbon oxides (CO_x)

SECTION 11. TOXICOLOGICAL INFORMATION

Product Information	
LD50 Oral	2,800 mg/kg (rat)
LD50 Dermal	>2,000 mg/kg (rabbit)
LD50 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

SECTION 12. ECOLOGICAL INFORMATION
12.1 Toxicity:

	Parameter	Method	Value	Units	Duration	Species
Acute toxicity fishes	LC50	Other	300	mg/L	96 hours	Lepomis macrochirus
Acute toxicity invertebrates	EC50	Other	200-227	mg/L	48 hours	Ceriodaphnia sp.
Toxicity algae and other aquatic plants	EC50		242	mg/L	5 days	Algae

12.2 Persistence and degradability:

Biodegradability does not pertain to inorganic substances

12.3 Bioaccumulative potential:

Does not bioaccumulate

12.4 Mobility in soil:

Dissociates into ions, low potential for adsorption in soil

12.5 Results of PBT and vPvB assessment:

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances

12.6 Other adverse effects:

None known

SECTION 13. DISPOSAL CONSIDERATION
13.1 Provisions relating to waste

This material, as supplied, is not considered hazardous

13.2 Waste Disposal Method

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

13.3 Container Handling and Disposal

Dispose of in accordance with local regulations



SECTION 14. TRANSPORT INFORMATION

Proper Shipping Name	Not regulated
Primary Hazard Class/Division	Not regulated
UN/NA Number	Not applicable
Label(s), Placard(s), Marking(s)	Not applicable
Reportable Quantity (RG)	None
49 STCC Number	Not applicable
ADR (EU), TDG (Canada)	Not regulated
INDF (sea), ICAO (air), IATA (air)	Not regulated

SECTION 15. REGULATORY INFORMATION

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 Classes

Fire Hazard.....NO
 Reactive Hazard.....NO
 Release of Pressure.....NO
 Acute Health Hazard.....YES
 Chronic Health 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 (Comprehensive Environmental Response Compensation and Liability Act):

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

STATE REGULATIONS

California Proposition 65

This product does not contain any components that are regulated under California Proposition 65

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 (USA)	DSL (Canada)	EINECS/ELI NSC (Europe)	ENCS (Japan)	IECSC (China)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Sodium Carbonate 497-19-8	X	X	X	X	X	X	X	X

Mexico – Grade

Moderate risk, Grade 2

WHMIS Hazard Class (Canada Only)

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

SECTION 16. OTHER INFORMATION

National Fire Protection Association Hazard Ratings – NFPA(R)

Health	2
Flammability	0
Reactivity	0
Special	None

4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant

National Paint & Coating Hazardous Materials Identification System (HMIS(R))

Health	2
Flammability	0
Physical Hazard	0
Personal Protection (PPE)	B

Protection = B (Safety glasses and gloves)

4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal

Certified to ANSI/NSF 60 – Soda Ash Dense Bulk: This product is certified ANSI/NSF 60 when used in treatment of drinking water at maximum dosage of 100 mg/L.

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 heading 2 and 3:

R36 Irritating to eyes

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

H319 Causes serious eye irritation

Disclaimer

The information herein is given in good faith but no warranty, expressed or implied, is made.

Revision Number

- 1.1: Updated manufacturers addresses, 12/31/2014
- 1.2: Updated to SDS, updated manufacturer address, 04/27/2015
- 1.3: Updated to SDS, corrected 7.2.2 last bullet, changed for to form, 07/24/2015
- 1.4: Updated to SDS, Change OCI to Ciner section 1.1, 06/24/2016
- 1.5: Updated to SDS, Change Tronox Alkali to Genesis Alkali and updated Solvay address section 1.1, 10/20/2017