

# Soda Ash / Sodium Carbonate Revision Date: 5/30/2019

# SAFETY DATA SHEET

# 1 PRODUCT AND COMPANY IDENTIFICATION

# 1.1 PRODUCT IDENTIFIERS

Product Name:	Soda Ash or Sodium Carbonate
Chemical Name:	Sodium Carbonate
Synonyms / Common Names:	Carbonic Acid Sodium Salt
Registration Number REACH:	01-2119485498-19-0019
Product Type REACH:	Substance/mono-constituent
CAS Number:	497-19-8
EC Index Number:	011-005-00-2
EC Number:	207-838-8
RTECS Number:	VZ4050000

# **1.2 RELEVANT IDENTIFIED USES**

Glass Production	Paper Production	Manufacture of Substances
Detergent Component	Laboratory Chemicals	Acidity Regulator

# **1.3 MANUFACTURER**

Ciner Wyoming LLC 254 County Road 4-6 Green River, Wyoming 82935 United States Telephone Number: (307) 875-2600 www.ciner.us.com

# 1.4 EMERGENCY TELEPHONE NUMBER

Emergency Response Information Provider: CHEMTREC Within the United States Emergency Telephone Number: 1-800-424-9300 Outside the United States / International Emergency Telephone Number: +1-703-527-3887

# 2 HAZARD(S) IDENTIIFICATION

# 2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS Classification in accordance with 29 CFR 1910 (OSHA HazCom Standard): Eye Irritation (Category 2A), H319 For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS

Pictograms:



Irritant

Signal Word: Warning

Hazard Statement(s): H319 Causes serious eye irritation.

Precautionary Statement(s):

P264 Wash skin thoroughly after handling.
P280 Wear eye protection / face protection.
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.

# 2.3 HAZARDS NOT OTHERWISE CLASSIFIED OR NOT COVERED BY GHS

None

# 3 COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 SUBSTANCES

Synonyms:	Soda Ash, Sodium Carbonate, Carbonic Acid Sodium Salt
Formula:	Na <sub>2</sub> CO <sub>3</sub>
Molecular Weight:	105.99 g/mol

Component (REACH Registration)	CAS #	Concentration	Classifications	Remark
Sodium Carbonate (01-2119485498-19-0019)	CAS #: 497- 19-8	≽ 99%	Eye Irrit. 2A, H319	Monoconstituent

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4 FIRST-AID MEASURES

# 4.1 DESCRIPTION OF FIRST-AID MEASURES

General - Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation - Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact - Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

After eye contact - Rinse immediately with plenty of water for at least 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion - Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Consult a doctor/medical service if victim is unwell.

#### 4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

#### 4.2.1 Acute Symptoms

If inhaled - Dry/sore throat. Coughing. Slight irritation. Exposure to high concentrations: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Respiratory difficulties.

In case of skin contact - Not irritating

In case of eye contact - Inflammation/damage of the eye tissue. Corrosion of the eye tissue. Lacrimation.

If swallowed – After absorption of high quantities: Nausea. Vomiting. Abdominal pain. Irritation of the gastric/intestinal mucosa.

#### 4.2.2 Delayed Symptoms

No effects known.

# 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No data available.

#### 5 FIRE-FIGHTING MEASURES

# 5.1 EXTINGUISHING MEDIA

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

Upon combustion CO and CO2 are formed. Reacts on exposure to water with some metals. CO2 generation occurs when mixed with acidic materials.

# 5.3 ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus for firefighting if necessary.

# 5.4 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Gloves. Safety glasses. Protective clothing. Dust cloud protection and heat/fire exposure: Compressed air respirator.

# 6 ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

# 6.2 ENVIRONMENTAL PRECAUTIONS

Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Violent exothermic reaction with some acids; release of harmful gases/vapors (carbon dioxide). Carbon dioxide is heavier than air and will collect in ducts, drains and low- lying areas. Prevent spreading in sewers.

# 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP

Prevent dust cloud formation. Scoop solid spill material into closed containers. Carefully collect the spill. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

# 6.4 REFERENCE TO OTHER SECTIONS

For disposal see section 13.

# 7 HANDLING AND STORAGE

# 7.1 PRECAUTIONS FOR SAFE HANDLING

Avoid contact with skin and eyes. 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.

# 7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in original container. Keep in properly labeled containers. Keep container tightly closed.

# 7.3. SUITABLE PACKAGING MATERIAL

No data available.

# 7.4 INCOMPATIBLE PRODUCTS

Aluminum, powdered aluminum, and acids.

# 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

Contains no substances with occupational exposure limit values.

#### 8.2 EXPOSURE CONTROLS

Appropriate engineering controls – Avoid formation of dust. Keep away from ignition sources. Keep container tightly closed. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# 8.3 PERSONAL PROTECTIVE EQUIPMENT

Eye / Face Protection - Safety glasses with side shields or protective goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection - Handle with gloves, butyl rubber or PVC, which have good resistance. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection – Protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection – For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 8.4 CONTROL OF ENVIRONMENTAL EXPOSURE

Prevent leakage or spillage if safe to do so. Do not let product enter drains. See section 6.2, 6.3, and 13.

# 9 PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form:	Crystalline Solid / Crystalline Powder / Grains / Lumps
Color:	Colorless
Odor:	Odorless
Odor Threshold:	No data available
Particle Size:	694 µm
pH:	11.6; 5.0%
Melting Point / Freezing Point:	851°C / 1,564°F
Boiling Point:	1,600°C / 2,912°F
Flash Point:	No data available
Explosion Limits:	No data available
Evaporation Rate:	No data available

Flammability:	Non-Combustible
Log Kow:	-6.19 Estimated Value
Viscosity:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Solubility Water:	212.5 g/l; 20°C / 68°F
Relative Density:	2.52 – 2.53; 20°C / 68°F
Absolute Density:	2,530 kg/m <sup>3</sup>
Decomposition Temperature:	>1600°C / >2912°F
Auto-Ignition Temperature:	>400°C / >752°F
Explosive Properties:	No data available
Oxidizing Properties:	No data available

#### 9.2 PHYSICAL HAZARDS

No data available

#### **10 STABILITY AND REACTIVITY**

#### 10.1 REACTIVITY

None under normal use conditions.

#### 10.2 CHEMICAL STABILITY

Stable. Decomposes by reaction with strong acid.

**10.3 POSSIBILITY OF HAZARDOUS REACTIONS** None under normal processing.

#### **10.4 CONDITIONS TO AVOID** Exposure to air or moisture over prolonged periods.

**10.5 INCOMPATIBLE MATERIALS** Aluminum, powdered aluminum, and acids.

#### 10.6 HAZARDOUS POLYMERIZATION

Hazardous polymerization does not occur.

#### 11 TOXICOLOGICAL INFORMATION

#### **11.1 INFORMATION ON TOXICOLOGICAL EFFECTS**

# 11.1.1 Acute toxicity

LD50 Oral - rat – 2,800 mg/kg LD50 Dermal – rabbit >2,000 mg/kg LD50 Inhalation - rat – 2.30 mg/l, 2-hour exposure time

#### **11.1.2 Corrosion/irritation** Skin - rabbit Result: Mild skin irritation – 24 hours

# 11.1.3 Serious eye damage/eye irritation

Eyes - rabbit Result: Severe eye irritation – 24 hours

# 11.1.4 Respiratory or skin sensitization

Inhalation - no data available Skin Sensitization: no data available

# 11.1.5 Germ cell mutagenicity

No data available

# 11.1.6 Carcinogenicity

No data available

# 11.1.7 Reproductive toxicity

No data available

#### **11.1.8 Specific target organ toxicity - single exposure** No data available

**11.1.9 Specific target organ toxicity - repeated exposure** No data available

# 11.1.10 Chronic effects from short and long-term exposure

On continuous / repeated exposure / contact: Red skin. Dry skin. Tingling / irritation of the skin. Affection of the nasal septum.

# 12 ECOLOGOCAL INFORMATION

# 12.1 TOXICITY

	Parameter	Method	Value	Duration	Species	Test Design	Fresh/Salt Water	Value Determination
Acute toxicity fishes	LC50 Other	Other	300 mg/l	96 h	Lepomis macronhirus	Static system	Fresh water	Experimental value
Acute toxicity invertebrates	EC50	Other	200-227 mg/l	48 h	Ceriodaphnia sp.	Semi- static	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50		242 mg/l	5 days	Algae			Experimental value

# 12.2 PERSISTENCE AND DEGRADABILITY:

Biodegradability: not applicable

# 12.3 BIOACCUMULATIVE POTENTIAL:

Low potential for bioaccumulation (Log Kow <4)

#### 12.4 MOBILITY IN SOIL:

Low potential for absorption in soil.

#### 12.5 RESULTS OF PBT AND VPVB ASSESSMENT:

PBT/vPvB assessment not available as chemical safety assessment is not required/not conducted.

#### 12.6 OTHER ADVERSE EFFECTS:

No data available

#### 13 DISPOSAL CONSIDERATIONS

# 13.1 WASTE DISPOSAL

Remove waste in accordance with local and/or national regulations. Contact a licensed professional waste disposal service to dispose of this material. Different types of hazardous waste should not be mixed together if it will entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. Do not discharge into drains.

#### **14 TRANSPORT INFORMATION**

# 14.1 UNITED STATES DEPARTMENT OF TRANSPORTATION (DOT)

Non-regulated

- 14.2 INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG) Non-regulated
- 14.3 INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA) Non-regulated

# 14.4 TDG/ADN/RID/ADR

Non-regulated

#### 15 REGULATORY INFORMATION

#### 15.1 SARA 302 COMPONENTS

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### 15.2 SARA 313 COMPONENTS

SARA 313: This material does not contain any chemical with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### 15.3 SARA 311/312 HAZARDS

Acute Health Hazard

#### **15.4 PENNSYLVANIA RIGHT TO KNOW COMPONENTS** Sodium carbonate, CAS-No: 497-19-8

- 15.5 NEW JERSEY RIGHT TO KNOW COMPONENTS Sodium carbonate, CAS-No: 497-19-8
- **15.6 WHMIS CLASSIFICATION: C, D2** Note: The product listed on this SDS has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations.
- **15.7 US CALIFORNIA SAFE DRINKING WATER & TOXIC ENFORCEMENT ACT (PROPOSITION 65)** This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

# 16 OTHER INFORMATION

# 16.1 FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTION 2 AND 3.

Eye Irrit.	Eye Irritation
H319	Causes serious eye irritation

#### 16.2 HMIS RATING

Health Hazard:	2
Flammability:	0
Physical Hazard:	0

# 16.3 NFPA RATING

Health Hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

# 16.4 NOTICE

The above information is believed to be correct but is not intended to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Ciner and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

# **16.5 PRODUCT CERTIFICATIONS**

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 100 mg/L under NSF/ANSI Standard 60.

