Material Safety Data Sheet

Carbon Dioxide Absorbent (RXSOL-81-8197-020)

1. Product and Company Identifaction

Product Name	Carbon Dioxide Absorbent
Part Number	RXSOL-81-8197-020

Company Details:....

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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Email	mail@rxmarine.com
Website	www.rxmraine.com

2. Composition / informationon ingredients

Component	CAS No.	Weight %
Sodium hydroxide	1310-73-2	90-95
Silica, amorphous	7631-86-9	5 - 10

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

3. Hazards Identification

Classification of the substance or mixture

Classification	This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Signal Word	Danger
Hazard Statements	May be corrosive to metals Causes severe skin burns and eye damage May cause respiratory irritation
Precautionary Statements	
Prevention	Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Use only outdoors or in a well-ventilated area Keep only in original container
Response	Immediately call a POISON CENTER or doctor/physician
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse
Eyes	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuerinsing
Ingestion	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
Spills	Absorb spillage to prevent material damage

Storage	Store locked up Store in a well-ventilated place. Keep container tightly closed Store in corrosive resistant polypropylene container with a resistant inliner Store in a dry place
Disposal	Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)	None identified WARNING. Cancer - https://www.p65warnings.ca.gov/.

4. First Aid Measures

Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor inattendance.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouthmethod if victim ingested or inhaled the substance; give artificial respiration withtheaidofapocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Call a physician or poison control center immediately
Most important symptoms and effects	Causes burns by all exposure routes. . Product is a corrosive material. Use of gastriclavage or emesis is contraindicated. Possible perforation of stomach or esophagusshouldbe investigated: Ingestion causes severe swelling, severe damage to the delicatetissueand danger of perforation.
Notes to Physician	Treat symptomatically.

5. Fire-fighting Measures

Suitable extinguishing media	$CO_{2,}$ dry chemical, dry sand, alcohol-resistant foam.
Unsuitable extinguishing media	
Flash Point	No information available
Method	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	Corrosive material. Causes burns by all exposure routes .
Hazardous Combustion Products	Thermal decomposition can lead to release of irritating gases and vapors. Sodium oxides.
Protective Equipment and Precautions for Firefighters	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) andfull protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

6. Accidental Release Measures

Personal Precautions	Use personal protective equipment as required. Ensure adequate ventilation. Evacuatepersonnel to safe areas. Avoid contact with skin, eyes or clothing. Avoid dust formation
Environmental precautions	Should not be released into the environment. Do not allow material to contaminategroundwater system. Do not flush into surface water or sanitary sewer system. See Section12foradditional Ecological Information.
Methods for Containment and Clean Up	Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

7. Handling and Storage

Handling	Use only under a chemical fume hood. Wear personal protective equipment/face protection. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance.

Storage	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

8. Exposure controls and personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Sodium hydroxide	Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3 TWA: 2 mg/m^3	IDLH: 10 mg/m^3 Ceiling: 2 mg/m^3	Ceiling: 2 mg/m^3
Silica, amorphous		(Vacated) TWA: 6 mg/m^3	IDLH: 3000 mg/m^3 TWA: 6 mg/m^3	

Engineering Measures	Use only under a chemical fume hood. Ensure that eyewash stations and safetyshowersare close to the workstation location.
Personal Protective Equipment	
Eye/face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as describedbyOSHA's eye and face protection regulations in 29 CFR 1910.133 or EuropeanStandardEN166.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or EuropeanStandardEN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical state	Solid
Appearance	Brown
Odor	Odorless
Odor Threshold	No information available
pH	No information available
Melting Point/Range	No data available
Boiling Point/Range	No information available
Flash Point	No information available
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	Not applicable
Specific Gravity	No information available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	Not applicable

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions. Hygroscopic
Conditions to Avoid	Incompatible products. Excess heat. Exposure to moist air or water.
Incompatible materials	Strong oxidizing agents, Strong acids

Hazardous decomposition products	Thermal decomposition can lead to release of irritating gases and vapors, Sodiumoxides
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute toxicity

Product Information	No acute toxicity information is available for this product.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium hydroxide	140 - 340 mg/kg (Rat)	1350 mg/kg (Rabbit)	Not listed
Silica, amorphous	>5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	-

Toxicologically Synergistic Products: No information available

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

Irritation	Causes burns by all exposure routes
Sensitization	No information available
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as acarcinogen.

Component	CAS No.	IARC	NTP	ACGIH	OSHA	Mexico
Sodium hydroxide	1310-73-2	Not listed	Not listed	Not listed	Not listed	Not listed
Silica, amorphous	7631-86-9	Not listed	Known	Not listed	Not listed	Not listed

Mutagenic Effects	No information available
Reproductive Effects	No information available
Developmental Effects	No information available
Teratogenicity	No information available
STOT - single exposure	Respiratory system
STOT - repeated exposure	None known
Aspiration hazard	No information available
Symptoms / effects,both acute and delayed	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
Endocrine Disruptor Information	No information available
Other Adverse Effects	The toxicological properties have not been fully investigated. See actual entry inRTECSforcomplete information.

12. Ecological information

Ecotoxicity	Contains a substance which is:. Harmful to aquatic organisms. The product contains following substances which are hazardousforthe environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Sodium hydroxide	Not listed	LC50: = 45.4 mg/L, 96h static (Oncorhynchus mykiss)	Not listed	Not listed
Silica, amorphous	EC50: 440 mg/L/72h	LC50: 5000 mg/L/96 h	Not listed	EC50: 7600 mg/L/48h

Persistence and Degradability	Insoluble in water
Bioaccumulation/ Accumulation	No information available
Mobility	Is not likely mobile in the environment due its low water solubility.

13. Disposal considerations

Waste treatment Method	Chemical waste generators must determine whether a discarded chemical is classifiedasahazardous waste. Chemical waste generators must also consult local, regional, andnational hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT

UN-No	UN1823
Proper Shipping Name	SODIUM HYDROXIDE, SOLID, MIXTURE
Hazard Class	8
Packing Group	

TDG

UN-No	UN1823
Proper Shipping Name	SODIUM HYDROXIDE, SOLID, MIXTURE
Hazard Class	8
Packing Group	II

IATA

UN-No	UN1823
Proper Shipping Name	SODIUM HYDROXIDE, SOLID
Hazard Class	8
Packing Group	II

IMDG/IMO

UN-No	UN1823
Proper Shipping Name	SODIUM HYDROXIDE, SOLID
Hazard Class	8
Packing Group	II

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Sodium hydroxide	1310-73-2	X	ACTIVE	-
Silica, amorphous	7631-86-9	X	ACTIVE	-

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea(KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Sodium hydroxide	1310-73-2	X	-	215-185-5	X	X	X	X	X	KE-31487
Silica, amorphous	7631-86-9	X	-	231-545-4	X	X	X	X	X	KE-31032

16. Other information

Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and weassume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

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