

1. Product and Company Identification

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Product Name Caustic Soda Lye
Part Number RXSOL-20-1308-002

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
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2. Composition / Information on ingredients

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Chemical Name	CAS	EC number	Weight	Formula
Caustic Soda	1310-73-2	215-185-5	14 at 100 g/l at 20 °C	
Melting Point	318 °C			
Boiling Point	1.390 °C at 1.013			
Flash Point	Not Applicable			
Evaporation Rate	Not Applicable			
Flammability (solid, gas)	No data available			
Explosive limits	No Data Available			
Upper/lower flammability or explosive limits	No data available			
Autoignition temperature	No data available			
Decomposition temperature	No data available			
Vapour pressure	No data available			
Density	2,13 g/cm ³ at 20 °C			
Relative Vapor Density	1,38 - (Air = 1.0)			
Freezing point	No data available			
Specific Gravity	No data available			
Partition coefficient	No data available			
Explosive properties	No data available			
Solubility	1.090 g/l at 20 °C			
Ignition temperature	No information available.			
Particle characteristics	No data available			

10. Stability and reactivity

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Reactivity	No data available .
Stability	The product is chemically stable under standard ambient conditions (room temperature) .
Possibility of hazardous reactions	Violent reactions possible with: Acetone Chlorine Ethylene oxide Fluorine Hydrogen halides Hydrazine hydrate hydroxylamine Acid anhydrides Acrolein Acid chlorides Acids sulfuric acid Chloroform Water hydrogen peroxide anhydrides phosphides halogen-halogen

compounds trichloroethene can decompose violently in contact with: Organic Substances hydrogen sulphide Risk of ignition or formation of inflammable gases or vapours with: powdered aluminium Ammonium salts persulfates Sodium borohydride phosphorus Oxides of phosphorus. Halogenated hydrocarbon Light metals Metals Risk of explosion/exothermic reaction with: Bromine Calcium in powder form furfuryl alcohol Nitromethane Peroxides organic nitro compounds Nitriles Acrylic monomers Chloroform with Acetone Nitrobenzene with Methanol Nitrobenzene with salts magnesium Zinc and Tin (in the presence of atmospheric oxygen and/or moisture).

No data available .

Aluminum, brass, Metals, metal alloys, Zinc, Tin

In the event of fire: see section 5

Conditions to avoid

Incompatible materials

Hazardous Polymerization

11. Toxicological information

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Acute toxicity

Oral: No data available Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit Result: Causes burns. Remarks: (Regulation (EC) No 1272/2008, Annex VI)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405) Remarks: (Regulation (EC) No 1272/2008, Annex VI) Remarks: Causes serious eye damage.

Respiratory or skin sensitization

Patch test: - In vitro study Result: negative Remarks: (ECHA)

Toxic Effects on Human

May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer).

Carcinogenicity

Carcinogenicity - No carcinogenic properties suspected. (IUCI)

Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Special Remarks on other Toxic Effects on Humans

Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism.

Additional Information

RTECS: AF3675000 Gastrointestinal disturbance To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After uptake of large quantities: muscular symptoms agitation Convulsions Headache Tremors Nausea psychoses

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. RTECS: WB4900000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

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Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Toxicity to fish	LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h Remarks: (ECOTOX Database).
Toxicity to daphnia and other aquatic invertebrates	EC50 - Ceriodaphnia (water flea) - 40,4 mg/l - 48 h Remarks: (ECHA)
Toxicity to bacteria	EC50 - Photobacterium phosphoreum - 22 mg/l - 15 min Remarks: (External MSDS)
Toxicity to algae	Static test EC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201) static test NOEC - Pseudokirchneriella subcapitata (green algae) - > 100 mg/l - 72 h (OECD Test Guideline 201)
Eco Toxicity	Not Available
COD and BOD 5	Not Available
Products Biodegradation	The methods for determining the biological degradability are not applicable to inorganic substances.
Mobility in soil	No Information available
Results of PBT and vPvB assessment	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Endocrine disrupting properties	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
Other adverse effects	Harmful effect due to pH shift. Forms corrosive mixtures with water even if diluted. Neutralisation possible in waste water treatment plants. Discharge into the environment must be avoided.

13. Disposal considerations

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Disposal methods	The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.
Contaminated packaging	Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.
Waste treatment Method	See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

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UN number	ADR/RID: 1823 IMDG: 1823 IATA: 1823
UN proper shipping name	ADR/RID:SODIUM HYDROXIDE, SOLID IMDG:SODIUM HYDROXIDE, SOLID IATA: SODIUM HYDROXIDE, SOLID
Transport hazard class(es)	ADR/RID: 8 IMDG: 8 IATA: 8
Packaging group	ADR/RID: II IMDG: II IATA: II
Environmental hazards	ADR/RID: No IMDG: No IATA: No
Special precautions for user	Tunnel restriction code : (C/E)

Further information	Not classified as dangerous in the meaning of transport regulations.
Transport in bulk according to IMO instruments	No data available

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006
Safety, health and environmental regulations specific for the product in question	European Inventory of Existing Commercial Chemical Substances (EINECS) -Listed. EC Inventory Listed. United States Toxic Substances Control Act (TSCA) Inventory- Listed. China Catalog of Hazardous chemicals 2015 Not- Listed. New Zealand Inventory of Chemicals (NZIoC) Listed. PICCS -Listed. Vietnam National Chemical Inventory -Listed. IECSC Listed. Korea Existing Chemicals List (KECL) -Listed.
Other regulations	Take note of Dir 94/33/EC on the protection of young people at work.
Chemical Safety Assessment	A Chemical Safety Assessment has been carried out for this substance.

16. Other information

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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 we assume 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 we 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. DISCLAIMER OF LIABILITY : The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.
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