Material Safety Data Sheet

Sodium Hydroxide Solution 1N (RXSOL-61-6294-500)

1. Product and Company Identifaction

Product Name	RXSOL-61-6294-500
Product Type	Sodium Hydroxide Solution 1N

Company Details:

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

Stock Pont : Mumbai, Kandla, Kolkata, Chennai, Visakhapatnam, Fujairah

Phone	+91 22 27815541 / 42
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	mail@rxmarine.com

2. Composition / informationon ingredients

SARA 313 Component	CAS Number	Percent Comp.	Dimension	Exposure Limits
Sodium Hydroxide	CAS# 1310-73-2	4%	W/V	OSHA PEL 2 mg/mƒ ACGIH 2mg/mƒ
Water, Deionized ASTM Type II	CAS# 7732-18-5	96%	V/V	None Established

3. Hazards Identification

May cause irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

Emergency Overview:Harmful If Swallowed Or Inhaled. May Cause Burns To Any Area Of Contact. Reacts With Water, Acids And Other Materials.

Inhalation:Mists May Irritate Respiratory Tract.

Ingestion:Swallowing may Cause Burns of the Mouth, Throat and Stomach.

Skin:May Cause Irritation to Skin

Eye Contact:May Cause Irritation to Eyes, and with Greater Exposures, Severe Buns with Possibly Blindness
Chronic Exposure:Persons with Pre-Existing Skin Disorders may be Susceptible to these Solutions.

Aggravated by Exposure:Persons with Pre-existing Skin Disorders or Eye Problems or Impaired Respiratory Function May be More Susceptible to the Effects of the Substance.

4. First Aid Measures

May cause irritation and burns. May be harmful if swallowed. Avoid breathing vapor or dust. Use with adequate ventilation. Avoid contact with eyes, skin, and clothes. Wash thoroughly after handling. Keep container closed.

FIRST AID: SKIN: EYES:INGESTION:

SKIN:	Wash exposed area with soap and water. If irritation persists, seek medical attention.
EYES:	Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally.
INGESTION:	Give several glasses of milk or water. Vomiting may occur spontaneously, but DO NOT INDUCE! Never give anything by mouth to an unconscious person.

5. Fire-fighting Measures

Fire Extinguisher Type:	Any means suitable for extinguishing surrounding fire
Fire / Explosion Hazards:	None Known
Fire Fighting Procedure:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing.

6. Accidental Release Measures

Absorb spill with inert material, then place in a chemical waste container. Neutralize with a weak acid.

Ventilate area of Leak or Spill. Keep Unnecessary and Unprotected People away from the areaof Spill. Wear Appropriate Personal Protective Equipment asSpecified in Section 7. Contain and Recover Liquid when Possible. Use Non-Sparking Tools andEquipment. Collect Liquid in an Appropriate Container or Absorb with an Inert Material (e.g., Vermiculite, Dry Sand, Earth). Do Not use Combustible Materials, such as Saw Dust. Do Not Flush to Sewer! US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

7. Handling and Storage

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling

8. Exposure controls and personal protection

Respiratory Protection:	None required
Ventilation	Local Mechanical
Protective Gloves:	Wear appropriate gloves to prevent skin exposure
Eye Protection:	Splash Goggles
Other Protective Equipment:	Wear appropriate clothing to prevent skin exposure

9. Physical and chemical properties

Melting Point:	~0° C
Boiling Point:	~100° C
Vapor Pressure:	Information not available
Vapor Density:	Information not available
Solubility in Water:	Soluble
Appearance /Odors:	Clear colorless solution /no odor
Flash Point:	Not flammable
Specific Gravity:	~1.0
Percent Volatile by	96%
Evaporation Rate	Information not available
Evaporation Standard	
Auto Ignition Temp	Not applicable
Lower Flamm. Limit in Air	Not applicable
Upper Flamm. Limit in Air	Not applicable

10. Stability and reactivity

Stability:	Stable
Conditions to Avoid:	Acids
Materials to Avoid:	Acids, flammable liquids, organic halogens, metals, nitrocompounds
Hazardous Decomposition Products:	Sodium Oxides
Hazardous polymerization:	Will Not Occur
Conditions to Avoid:	None known

11. Toxicological information

Carcinogenic References: NTP Carcinogen - Known: No, IARC Category- None

12. Ecological information

Environmental Fate: No Information Found.

13. Disposal considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport information

DOT Classification: UN1824, Sodium Hydroxide Solution, 8, PG II

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

15. Regulatory information

Chemical Inventory Status –
Part 1:Ingrdient
Sodium Hydroxide (1310-73-2))
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status –
Part 2:Ingredient
Sodium Hydroxide (1310-73-2)
Korea Yes
DSL Yes
NDSL No
Phil. Yes

Federal, State & International Regulations –
Part 1: Ingredient.
Sodium Hydroxide (1310-73-2)
RQ No
TPQ No
List NO
Chemical Catg No

Federal, State &
International Regulations –
Part 2:Ingredient
Sodium Hydroxide (1310-73-2)
CERCLA 1000
261.33 No
8(d) No

Chemical Weapons Convention: No
TSCA 12 (b):No
CDTA:No PURE/LIQUID
SARA 311/312: Acute:YES
Chronic: No
Fire: No
Pressure: No
Reactivity: No
Australian Hazchem Code: 2R
Poison Schedule:S5

16. Other information

Conditions aggravated/Target organs: Persons with preexisting skin, eye, or respiratory disorders may be susceptible. Corrosive! Acute: Irritation and burns to skin, eyes, lungs, mucous membranes and GI tract. Pneumonitis. Chronic: Dermatitis and other skin

Flammability

Health

Reactivity

Revisions	NFPA
7/30/2010	0.1 updated msds to 16 section from 10 section msds. STN
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10-09-2013

1. Product and Company Identifaction

Product Name

Product Type Steelex K 20

Company Details:

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

Phone +91 22 65113333 / 5555 / 9999

Fax +91 22 2781 1318 :::AOH :0091 9821214367

Email mail@rxmarine.com

2. Composition / informationon ingredients

	Chemical Name	Concentration	CAS Number
1.	Caustic soda	40 %	1310-73-2
2.	Sodium Tripoly Phosphate	30 %	7758-29-4
3.	Sodium Carbonate	17 %	497-19-8
4.	Sodium Meta Silicate	10%	6834-02-0
5.	Fatty Alcohol Ethoxylate	2%	N.A.
6.	Fatty Amino Ethoxylate	1%	61791-14-8

3. Hazards Identification

Main Hazards

Eye Contact	R 36 / 38 Cause severe burns with damage to eyes and possible blindness.
Ingestion	R 34 / 35 Can cause severe burns to mouth, throat,esophagus and stomach. May be fatal.

Inhalation	R 20 / 21 /22 Inhalation of dust may damage upper respiratory tract and lung tissue which may cause chemical pneumonia
Skin Contact	Can cause severe burns, irritations and rash
Other Health Effects	Irritation or damage to respiratory tract tissue and increased susceptibility to respiratory illness.

4. First Aid Measures

Eye Contact	Flush eyes with plenty of water. Hold lids apart to ensure flushing of entire surface to prevent or relieve irritation. If irritation persists, seek medical attention.
Ingestion	Flush eyes with plenty of water. Hold lids apart to ensure flushing of entire surface to prevent or relieve irritation. If irritation persists, seek medical attention.
Inhalation	Remove person from contaminated area. If breathing has stopped, resuscitate and administer oxygen if available.Seek immediate medical attention
Skin Contact	Immediately wash contaminated skin with plenty of water. Remove contaminated clothing and footwear.Wash clothing before reuse. Discard footwear if it can not be decontaminated. If irritation continues, seek medical attention.

5. Fire-fighting Measures

Flash Point	Not applicable
Auto Ignition	Product is not self igniting
Flammable Range	Not flammable in nature, but if involved in a fire, it will generate toxic oxides of carbon. In the presence of water, material may react with amphoteric metals (such as aluminium, zinc or tin) generating hydrogen gas which will burn or explode if ignited
Extinguishing Media	Water fog or spray / carbon dioxide / foam
Special Fire-Fighting	Wear NIOSH approved full protective clothing & self-contained breathing apparatus. Keep containers cool to prevent rupture and release of material.

6. Accidental Release Measures

Step to taken if material us released or spilled	Avoid contact with skin, eyes and clothing. Wear protective equipment. Do not inhale dust. Sweep or shovel up into plastic-lined steel containers and cover.
Pollution Protection	Not a severe pollutant. Dilute with plenty of water
Protection for spilled of chemical	Flush the spill area with pleanty of water and neutralise with dilute acids like acetic acid & collect the washings in a specified container. Dispose of in accordance with local, state and national regulations.

7. Handling and Storage

Storage	Store in cool & dry place (preferably within 25-350 C under closed condition to avoid any contaminations).Keep away from acids and organic compounds. Loosen cover cautiously when opening.
Handling	Emergency eye wash and safety shower should be available. Wash thoroughly after handling.

Protective practices during maintenance of contaminated equipment	Wear NIOSH approved full protective clothing & self-contained breathing apparatus. Keep containers cool to prevent rupture and release of material
Special Precaution	Store above freezing temperature

8. Exposure controls and personal protection

Ventilation and Engineering Controls	Local exhaust recommended
Respiratory Protection	Use NIOSH approved respirator whenever necessary
Eye Protection	Chemical safety goggles / face shield
Skin Protection	Chemically resistant coveralls, hat & shoes or boots
Other Protective equipment	Use Neoprene / natural rubber glooves

9. Physical and chemical properties

Melting Point	Undetermined
Boiling Point	Undetermined
Density	Not Applicable
Pressure	Undetermined
Sticky(SG)	Undetermined
Solubility in water	Fully soluble
Chemical State	Solid at 300C
Color and Smell	White to off white powder and odourless.
Ignition points	Undetermined
Temperature get by itself	Undetermined
Testing Procedure	Undetermined
Other information	None

10. Stability and reactivity

Chemical Stability	Stable
Conditions to avoid	Stable under normal conditions. Avoid moisture and heat.
Material with which chemical mixture is incompatible	Acids, acid salts, amphoteric metals (such as aluminium,zinc, tin), organic compounds and heated water.
Reactivity a) Hazardous decomposition products b) Hazardous Polymerization	a)If involved in a fire, it will generate toxic oxides of carbon and miscellaneous organic vapours. b)Will not occur.

11. Toxicological information

Toxicity Data	There is no specific toxicology data for the above product
Carcinogenicity	The product have been found not to be carcinogenic
Irritancy of Product	Mildly irritating to contaminated tissues depending on the duration of contact
Sensitization of Product	The components of this products are not known to be sensitiziers
Reproductive Toxicity information	No reproductive toxicity is expected in humans
Mutagenicity	The product is not expected to cause any mutagenic effects in human
Embryotoxicity	The product is not expected to cause embroytoxic effects in human
Teratogenicity	The product is not expected to cause teratogenic effects in human.
Biological Exposure Indicates	No data are available.

12. Ecological information

Environmental Stability	Naturally stable
Effect of Material on Plants or Animals	Product is known to have non-toxic effects.
Effect of Chemical on Aquatic Life	Product is known to have non-toxic effects.
Mobility	The components of this product are inert and hence do not present any hazard of mobility.
Persistence and Biodegradability	All components of this product are known to be biodegradable.
Potential to Bioaccumulations	No data are currently available
Ozone-Depletion Potential	Not applicable

13. Disposal considerations

Unused Product/ Empty Container :

Wash throughly the empty packing material / drum /carbouys and collect the washings in suitable containers & dispose the same in accordance with the local, state and national regulations.

Disposal Information :

Dispose of in accordance with local, state and national regulations. For major spills consult Grauer & Weil (I)Ltd., for necessary action.

14. Transport information

UN-Number	1823
Packaging group	II
Label	8
EmS No.	8-06
MFAG No.	705
IMDG Class	8225
Addit Description of goods	Caustic soda

Additional information : No dangerous goods in accordance with the above orders

15. Regulatory information

Designations according to EC guidelines :

The product is not subjected to identification regulations under EC directives and the Ordinance on Hazardous Materials (GefStoffV).Observe the normal safety regulations when handling chemicals.

National regulations :

R 51 / 53 Water hazard class 2 (Self-assessment) :hazardous for water

16. Other information

Abbreviations for R phrases :

- 10 Flammable
- 2 / 25 Toxic by inhalation and if swallowed
- 21 Harmful in contact with skin 34 Causes burns, 35 Causes severe burns
- 23 / 24/ 25 Toxic by inhalation, in contact with skin and if swallowed
- 36 / 38 Irritating to eyes and skin.
- R 51 / 53 Toxic to aquaticorganisms, may cause long-termadverse effect in aquaticenvironment.

Safety phrases :

- 26 In case of contact with eyes,rinse immediately with plenty of water and seek medical advice.
- 36 / 37 Wear suitable protective clothing andgloves.
- 45 In case of accident or if your feel unwell, seek medical immediately.
- 60 This material and its container must be disposed as hazardous waste.

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