### 1. Product and Company Identifaction

www.rxmarine.com

Product Name SULPHURIC ACID 25%
Part Number RXSOL-60-6605-637

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

Phone +91 22 20871200 - 1400

Fax +91 22 27612100 :::AOH :0091 9821214367

 Email
 mail@rxmarine.com

 Website
 www.rxmraine.com

## 2. Composition / Information on ingredients

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Chemical Name CAS EC number Weight

Sulfuric acid 7664-93-9 231-639-5 >= 20 - < 30 %

#### 3. Hazards Identification

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Signal Word Danger

Hazard Statements H290 May be corrosive to metals.H314 Causes severe skin burns and eye

damage

P280 Wear protective gloves.P305 + P351 + P338 Wear eye protection/ face protection. IF IN EYES: Rinse cautiously with

water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

Precautionary statements P234 Keep only in original packaging. P280 Wear protective gloves/

protective clothing/ eye protection/ face protection. P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Classification of the substance or mixture Not a hazardous substance or mixture according to Regulation (EC) No

1272/2008.

Supplemental Hazard Statements None

Other hazards

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.

#### 4. First Aid Measures

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General advice First aiders need to protect themselves.

If inhaled After inhalation: fresh air. Call in physician.

Eye Contact After eye contact: rinse out with plenty of water. Immediately call in

ophthalmologist. Remove contact lenses.

Swallowed After swallowing: make victim drink water (two glasses at most), avoid

vomiting (risk of perforation). Call a physician immediately. Do not

attempt to neutralise.

Skin Contact In case of skin contact: Take off immediately all contaminated clothing.

Rinse skin with water/ shower. Call a physician immediately.

Inhalation Remove patient to fresh air, keep warm and at rest and get medical

assistance in necessary.

Ingestion Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center

immediately.

labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment No data available

needed

## 5. Fire-fighting Measures

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Flammability May be combustible at high temperature.

Flash Point Higher than 93.3°C (200°F).

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances

and the surrounding environment.

Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are

given.

Special hazards arising from the substance or mixture Sulfur oxides Not combustible. Ambient fire may liberate hazardous

vapours. Fire may cause evolution of: Sulfur oxides.

Further information Remove container from danger zone and cool with water. Suppress

(knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water

system.

Hazardous combustion Fire may cause the evolution of Sulphur oxides, nitrogen oxides.

products

Advice for firefighters Stay in danger area only with self-contained breathing apparatus. Prevent

skin contact by keeping a safe distance or by wearing suitable protective

clothing.

Protective Equipment Use personal protective equipment.

Specific Hazards Arising from the Chemical Has a fire-promoting effect due to the release of oxygen.

Ambient fire may liberate hazardous vapours.

#### 6. Accidental Release Measures

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Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for

emergency responders: For personal protection see section 8.

Spillage Oxidizing material. Stop leak if without risk. Avoid co

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition

sources. Call for assistance on disposal.

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice

for emergency responders: Protective equipment see section 8.

Do not let product enter drains.

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H?, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

Personal Protection

Environmental Precaution

Methods and materials for containment and cleaning

### 7. Handling and Storage

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Advice on safe handling

Advice on protection against fire and explosion

Incompatible materials

Hygiene measures

Precautions for safe handling

Conditions for safe storage, including any incompatibilities

Storage conditions

Storage class

Specific end use(s)

Handling

Advice on general occupational hygiene

Requirements for storage

Observe label precautions.

Provide appropriate exhaust ventilation at places where dust is formed.

Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.

Change contaminated clothing and immerse in water. Preventive skin protection Wash hands and face after working with substance. For precautions see section 2.2.

Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

No metal or light-weight-metal containers. Tightly closed. No metal containers. Recommended storage temperature see product label.

Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals

Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

Keep in cool and store under shade.

# 8. Exposure controls and personal protection

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Occupational Exposure limit values

Biological limit values

Exposure controls

**Engineering Control** 

Eye/face protection

**Body Protection** 

Skin protection

No specific occupational exposure limit has been established.

No data available

No specific additional engineering controls are required. Provide good natural or artificial ventilation.

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Tightly fitting safety goggles

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Viton® Minimum layer thickness: 0,7 mm Break through time: 480 min Material tested:Vitoject® (KCL 890 / Aldrich Z677698, Size M) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those

stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: butyl-rubber Minimum layer thickness: 0,7 mm Break through

time: 120 min Material tested:Butoject® (KCL 898)

Respiratory protection Recommended Filter type: Filter type P2 The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices

are carried out according to the instructions of the producer. These

measures have to be properly documented.

Other Protection Measure Handle in accordance with good industrial hygiene and safety practice.

Control of environmental exposure Do not let product enter drains.

Thermal hazards No data available

### 9. Physical and chemical properties

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Physical stateLiquidColourColorlessOdourOdorlessOdor ThresholdNot Applicable

pH 20 °C

Melting Point No data available 103 °C at 1.013 hPa **Boiling Point** 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 338 °C

Vapour pressure

Density

1,18 g/cm3 at 20 °C

Vapour Density

No Data Available

Freezing point

No data available

No data available

No data available

Partition coefficient

No data available

Explosive properties None Solubility 20 °C

Ignition temperature No information available.

# 10. Stability and reactivity

Possibility of hazardous reactions

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Reactivity

Stability The product is chemically stable under standard ambient conditions (room

temperature).

A risk of explosion and/or of toxic gas formation exists with the following substances: Violent reactions possible with: Water Alkali metals alkali compounds AmmoniaAldehydes acetonitrile Alkaline earth metals alkalines Acids alkaline earth compounds Metals metal alloys Oxides of phosphorus phosphorus hydrides halogen-halogen compounds oxyhalogenic compounds permanganates nitrates Carbides combustible substances organic solvent acetylidene Nitriles organic nitro compounds anilines Peroxides picrates nitrides lithium silicide iron(III) compounds

Strong heating (decomposition).

Strong oxidising agent

Animal/vegetable tissues, MetalsContact with metals liberates hydrogen

bromates chlorates Amines perchlorates hydrogen peroxide.

Conditions to avoid

Incompatible materials

Hazardous Polymerization

In the event of fire: see section 5

#### 11. Toxicological information

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Acute toxicity

Skin corrosion/irritation

Serious eye damage/eye irritation Respiratory or skin sensitization

Carcinogenicity

Toxic Effects on Human

Germ cell mutagenicity

Reproductive toxicity

Specific target organ toxicity - single exposure Special Remarks on other Toxi Effects on Humans

Additional Information

Endocrine disrupting properties

LD50 Oral - Rat - male and female - 2.140 mg/kg Remarks: (ECHA) Inhalation: Corrosive to respiratory system. Dermal: No data available.

Skin - Rabbit Result: Extremely corrosive and destructive to tissue. Remarks: (IUCLID)

Causes serious eye damage.

No data available

No data available

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).

Test Type: Ames test Test system: Salmonella typhimurium Result: negative Remarks: (HSDB)

No data available

No data available

Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, which becomes evident upon reexposure 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.

RTECS: BD0725000 Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Salivation, Nausea, Vomiting, Fever

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. Irritation and corrosion, Cough, Shortness of breath, Nausea, Vomiting, Diarrhea, Pain, Risk of blindness! After inhalation of aerosols: damage to the affected mucous membranes. After skin contact: severe burns with formation of scabs. After eye contact: burns, corneal lesions. After swallowing: severe pain (risk of perforation!), nausea, vomiting and diarrhoea. After a latency period of several weeks possibly pyloric stenosis. 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

Toxicity

Bioaccumulative potential

Toxicity to fish

Toxicity to daphnia and other aquatic invertebrates

Toxicity to algae

No data available

No data available

No data available

LC50 - Danio rerio (zebra fish) - > 10 mg/l - 96 h (OECD Test Guideline 203) Remarks: No toxicity at the limit of solubility.

LC50 - Daphnia magna (Water flea) - > 10 mg/l - 48 h (OECD Test Guideline 202) Remarks: No toxicity at the limit of solubility.static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202)

LC50 - Chlorella vulgaris (Fresh water algae) - 8,4 mg/l - 3 d static test

ErC50 - Desmodesmus subspicatus (green algae) - > 100 mg/l - 72 h

(OECD Test Guideline 201)

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.

The substance/mixture does not contain components considered to have Endocrine disrupting properties

> 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 Forms corrosive mixtures with water even if diluted. Harmful effect due to pH shift. Endangers drinking-water supplies if allowed to enter soil or

water. Discharge into the environment must be avoided. No data available

### 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 Dispose of as unused product.

See www.retrologistik.com for processes regarding the return of Waste treatment Method

chemicals and containers, or contact us there if you have further

questions.

### 14. Transport information

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UN number ADR/RID: 2796 IMDG: 2796 IATA: 2796

ADR/RID : SULPHURIC ACID IMDG: SULPHURIC ACID UN proper shipping name

IATA:SULPHURIC ACID

ADR/RID: 8 IMDG: 8 IATA: 8 Transport hazard class(es) Packaging group ADR/RID: II IMDG: II IATA: II ADR/RID: No IMDG: No IATA: No Environmental hazards

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 IMOinstruments No data available

## 15. Regulatory information

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Inventory status

Components are on the following inventories: Polymaleic acid: - US TSCA, Canadian DSL, EU EINECS, Australian AICS, Korean, Philippine PICCS and Chinese Xi irritant R 36/38 Irritant to eyes & skin R 41 Risk of serious damage to eyes S24/25 Avoid contact with skin and eyes S26/28 In case of contact eyes & skin, rinse with plenty water and seek medical advice Section 312/313: Not listed. Not listed under California proposition 65.

Safety, health and environmental regulations/legislation specific for the This material safety data sheet complies with the requirements of substance or mixture

Regulation (EC) No. 1907/2006

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous OXIDISING substances. : LIQUIDS AND **SOLIDS** 

**ENVIRONMENTAL HAZARDS** 

Authorisations and/or restrictions on use Regulation (EU) 2019/1148 on the marketing and use of explosives

precursors: sulphuric acid

Other regulations

Chemical Safety Assessment

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable. Take note of Dir 94/33/EC on the protection of young people at work.

For this product a chemical safety assessment was not carried out.

#### 16. Other information

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Other Information

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