1. Product and Company Identifaction

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Product Name Anti Rust NCML solution
Part Number RXSOL-22-1820-025

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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Emailmail@rxmarine.comWebsitewww.rxmraine.com

2. Composition / Information on ingredients

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Chemical Name CAS EC numbe Formula Oxalic Acid 144-62-7 205-634-3 $C_2H_2O_4$ Proprietory Blend with Inhibitor --- --- ---

3. Hazards Identification

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Signal Word Danger

Hazard Statements H302 + H312 Harmful if swallowed or in contact with skin. H318 Causes

serious eye damage.

Precautionary statements P264 Wash skin thoroughly after handling. P280 Wear protective gloves/

protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P302 + P352 + P312 IF ON SKIN: Wash with plenty of water.Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P362 + P364 Take off

contaminated clothing and wash it before reuse

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 Show this material safety data sheet to the doctor in attendance.

If inhaled After inhalation: fresh air.

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

ophthalmologist. Remove contact lenses.

Swallowed After swallowing: immediately make victim drink water (two glasses at

most). Consult a physician.

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

Rinse skin with water/ shower. Consult a physician.

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.

Most important symptoms and effects, both acute and delaye

The most important known symptoms and effects are described in the

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

Flash Point Dry powder Dry sand

Suitable extinguishing media Water Foam Carbon dioxide (CO2) Dry powder

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

given.

Special hazards arising from the substance or mixture Carbon oxides Combustible. Development of hazardous combustion gases

or vapours possible in the event of fire.

Further information 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

Spillage

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 Oxides of phosphorus Sodium oxides Not combustible. Fire may cause

evolution of: Oxides of phosphorus 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: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection

see section 8...

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.

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 dry. Dispose of

properly. Clean up affected area. Avoid generation of dusts.

7. Handling and Storage

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Advice on safe handling

Environmental Precaution

Methods and materials for

containment and cleaning

Advice on protection against fire and explosion

Incompatible materials

Work under hood. Do not inhale substance/mixture.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

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

Hygiene measures

Precautions for safe handling

Storage conditions

Storage class

Specific end use(s)

Handling

Advice on general occupational hygiene

Requirements for storage

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

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

Tightly closed. Dry. Moisture sensitive.

Storage class (TRGS 510): 11: Combustible Solids

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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Exposure controls

Control parameters

Engineering Control

Eye/face protection

Body Protection Skin protection

Respiratory protection

Other Protection Measure Control of environmental exposure Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.

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

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Protective clothing

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: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L 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: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L

Required when dusts are generated. Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system. 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.

Handle in accordance with good industrial hygiene and safety practice.

Do not let product enter drains.

9. Physical and chemical properties

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Physical state Liquid

Colour Characterisitic Odour Odorless Odor Threshold Not Applicable

рΗ Acidic

Boiling Point No data available Flash Point No data available **Evaporation Rate** Not Applicable Flammability (solid, gas) No data available No Data Available Explosive limits No data available Upper/lower flammability or explosive limits Autoignition temperature No data available Decomposition temperature No data available No data available Vapour pressure No data available Relative Density

No data available Freezing point No data available Specific Gravity Partition coefficient No data available Explosive properties No data available No data available Solubility

Ignition temperature No information available.

Particle characteristics No data available

10. Stability and reactivity

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Reactivity The following applies in general to flammable organic substances and

mixtures: in correspondingly fine distribution, when whirled up a dust

explosion potential may generally be assumed.

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

temperature).

Possibility of hazardous reactions Risk of explosion with: chlorates sodium hypochlorite Strong oxidizing

agents silver salts of oxyhalogenic acids Exothermic reaction with: bases

Ammonia Mercury

Conditions to avoid Avoid moisture. no information available

Incompatible materials Strong oxidizing agents, acids Hazardous decomposition products In the event of fire: see section 5

11. Toxicological information

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Acute toxicity LD50 Oral - Rat - female - 375 mg/kg Remarks: (ECHA) Inhalation: No data available LD50 Dermal - Rabbit - 20.000 mg/kg Remarks:

(Regulation (EC) No 1272/2008, Annex VI) (ECHA)

Skin corrosion/irritation Skin - Rabbit Result: No skin irritation (OECD Test Guideline 404)

Eyes - Rabbit Result: Risk of serious damage to eyes. - 24 h(OECD Test Serious eye damage/eye irritation

Guideline 405)

Local lymph node assay (LLNA) - Mouse Result: negative (OECD Test Respiratory or skin sensitization

Guideline 429)

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

Germ cell mutagenicity

Reproductive toxicity

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

Endocrine disrupting properties

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Test Type: Mutagenicity (mammal cell test): chromosome aberration. Test system: Chinese hamster lung cells Metabolic activation: without metabolic activation Method: OECD Test Guideline 473 Result: negative Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

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.

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. Repeated dose toxicity - Rat - male and female - Oral - 90 Days - NOAEL (No observed adverse effect level) - 63 mg/kg RTECS: RO2450000 Kidney injury may occur., Contact with eyes can cause:, Damage to the eyes.To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

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Bioaccumulative potential

Persistence and degradability

Toxicity to fish

Toxicity to daphnia and other aquatic invertebrates

Toxicity to algae

Toxicity to bacteria

Products Biodegradation

Mobility in soil

Results of PBT and vPvB assessment

Endocrine disrupting properties

Other adverse effects

Bioaccumulation Oncorhynchus tshawytscha(Disodium molybdate dihydrate) Remarks: No data available

Biodegradability aerobic - Exposure time 20 d Result: 89 % - Readily biodegradable. Remarks: (ECHA)

Static test LC50 - Leuciscus idus melanotus - 160 mg/l - 48 h Remarks: (ECHA)

EC50 - Daphnia magna (Water flea) - 162,2 mg/l - 48 h (OECD Test Guideline 202)

Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 19,83 - 21,35 mg/l - 72 h (OECD Test Guideline 201)

Static test EC50 - activated sludge - 820~mg/l - 3~h (OECD Test Guideline 209) Remarks: The value is given in analogy to the following substances: disodium molybdate

The methods for determining the biological degradability are not applicable to inorganic substances.

No Information available

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 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.

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. 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: IMDG: IATA: UN proper shipping name ADR/RID:, IMDG: IATA: Transport hazard class(es) ADR/RID: IMDG: IATA: ADR/RID: IMDG: IATA: Packaging group

ADR/RID: NO IMDG: NO IATA: NO Environmental hazards

Further information Not classified as dangerous in the meaning of transport regulations.

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.

Safety, health and environmental regulations specific for the product in European Inventory of Existing Commercial Chemical Substances question

(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.

National legislation

No data available.

Other regulations

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.

Chemical Safety Assessment

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

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 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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