Material Safety Data Sheet

Vanadium Inhibitor RXSOL ORG 70 (RXSOL-81-1770-210)

1. Product and Company Identifaction

Product Name	Vanadium Inhibitor RXSOL ORG 70
Part Number	RXSOL-81-1770-210

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

Stock Point : Mumbai, Gandhidham, Chennai, Visakhapatnam, Kolkata, Fujairah, Muscat, Kenya, Canada

Phone	+91 22 27815541 / 42
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	123@rxmarine.com
Website	www.rxmarine.com

2. Composition / informationon ingredients

Name of Substance	Cas Number	Weight %
Fatty Acids, Tall Oil, Magnesium Salts	67701-23-9	40 - 80
Distillates, Petroleum, Hydrotreated Heavy Naphthenic	64742-52-5	10 - 20
Solvent Naphtha (petroleum), Heavy Arom	64742-94-5	10 - 20
Naphthalene	91-20-3	1 - 3

3. Hazards Identification

Signal Word	Warning
Hazard Statements	Combustible liquid. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. Suspected of causing cancer. Toxic to aquatic life with long lasting effects.
Precautionary statements - prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from flames and hot surfaces-No smoking. Avoid breathing vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Precautionary statements - response	If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash with plenty of water. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish. Collect spillage.Get medical attention/advice if you feel unwell

4. First Aid Measures

Skin Contact	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
Most important symptoms/effects	Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.
Notes to Physician	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed. Treat symptomatically

5. Fire-fighting Measures

Flammability of the Product	Flammable.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available
Specific Hazards Arising from the Chemical	The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. During fire, gases hazardous to health may be formed.
Hazardous Combustion Products	Carbon monoxide (CO) Carbon dioxide (CO2)
Protective Equipment and Precautions for Firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Further Information	Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors and spray mists. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the MSDS.
Methods and materials for containment and cleaning up	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. The product is immiscible with water and will sediment in water systems. Prevent entry into waterways, sewer, basements or confined areas. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
Enviromental Precaution	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and Storage

Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from open flames, hot surfaces and sources of ignition. When using do not smoke. Avoid inhalation of vapors and spray mists. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
Storage	Store locked up. Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the MSDS).
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

8. Exposure controls and personal protection

Engineering Control	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station. Eye wash fountain and emergency showers are recommended.
Personal Protection	Eye/face Protection : Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure. Long sleeved clothing.Flame retardant antistatic protective clothing. Respiratory Protection : Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 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.

OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

	Components	Type	Value	Form
Occupational exposure limits	Distillates,Petroleum, Hydrotreated Heavy Naphthenic (CAS 64742-52-5)	PEL	5 mg/m3 2000 mg/m3 500 ppm	Mist.
	Naphthalene (CAS 91-20-3)	PEL	50 mg/m3 10 ppm	
	Solvent Naphtha (petroleum), Heavy Arom. (CAS 64742-94-5)	PEL	400 mg/m3 100 ppm	

Biological limit values	No biological exposure limits noted for the ingredient(s).
US ACGIH Threshold Limit Values	Naphthalene (CAS 91-20-3) Can be absorbed through the skin. Solvent Naphtha (petroleum), Heavy Arom.(CAS64742-94-5) Can be absorbed through the skin.
Hygiene Measures	Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.



Gloves



Suit

9. Physical and chemical properties

Form	Liquid
Colour	Dark brown
Odour	Hydrocarbon-like.
Odor Threshold	No Information Available

pH	Not Applicable
Melting Point	-40 °F (-40 °C)
Boiling Point	348.8 °F (176 °C)
Flash Point	150.1 °F (65.6 °C) Pensky-Martens Closed Cup
Evaporation Rate	1 (Ether =1)
Flammability (solid, gas)	Not Applicable
Explosive limits Lower / Uper	Not Available
Vapour pressure	5 mm Hg @ 21°C
Vapour Density	> 1 (Air =1)
Secific Gravity	1.42
Decomposition Temperature	No information available
Partition coefficient	No data available
Autoignition Temperature	No data available
Solubility in Water	Not Soluble
Viscosity	400 cSt @ 60°F
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
Pour point	-40 °C

10. Stability and reactivity

Recativity Hazard	The product is stable and non-reactive under normal conditions of use, storage and transport.
Stability	Product is stable under normal conditions
Possibility of hazardous reactions	No known hazardous reactions.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents, Strong acids, Strong reducing agents
Hazardous Decomposition Products	No hazardous decomposition products are known.
Hazardous Polymerization	Hazardous polymerization does not occur. Hazardous Reactions None under normal processing

11. Toxicological information

Acute oral toxicity	May be fatal if swallowed and enters airways. Harmful if inhaled.		
Acute dermal toxic	Dermal LD50	Rabbit	> 5000 mg/kg
	Inhalation Mist LC50	Rat	> 5 mg/l, 4 h
	Oral LD50	Rat	> 3000 mg/kg
Skin corrosion	Drying-out effect resulting in rough and chapped skin. Mixture causes skin irritation.		
Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. Can be absorbed through skin. Eyes: Causes eye irritation. Inhalation: Vapor causes respiratory tract and mucous membrane irritation. Ingestion : Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.		
Special Remarks on Chronic Effects on Humans	Detected in maternal milk in human. Passes through the placental barrier in animal. Embryotoxic and/or foetotoxic in animal. May cause adverse reproductive effects (male and femael fertility (spontaneous abortion and fetotoxicity) and birth defects based animal data.		
Further information After absorption:	Headache, somnolence, Dizziness, euphoria, agitation, spasms, narcosis Effect potentiated by: ethanol Damage to: Kidney, Central nervous system, Liver		

12. Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects. Components Species Test Result Distillates, Petroleum, Hydrotreated Heavy Naphthenic (CAS 6474252-5) Aquatic Acute Algae NOEL Algae >= 100 mg/l, 72 h Crustacea EC50 Daphnia > 10000 mg/l, 48 h Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 h Chronic Crustacea NOEC Daphnia 10 mg/l, 21 d Naphthalene (CAS 91-20-3) Aquatic Crustacea EC50 Water flea (Daphnia magna)1.09 - 3.4 mg/l,48 hours Fish LC50 Pink salmon (Oncorhynchus gorbuscha) 1.11 - 1.68 mg/l, 96 hours Solvent Naphtha (petroleum), Heavy Arom. (CAS 64742-94-5) Aquatic Crustacea EC50 Water flea (Daphnia pulex) 2.7 - 5.1 mg/l, 48 hours Fish LC50 Rainbow trout,donaldson trout 8.8 mg/l, 96 hours
COD and BOD 5	Not Available
Products of Biodegradation:	No information available.
Mobility in soil	No information available.
Results of PBT and vPvB assessment	Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.
Other adverse effects	Discharge into the environment must be avoided.

13. Disposal considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations :	Dispose in accordance with all applicable regulations.
Hazardous waste code :	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products :	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging :	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN Number	NA 1993
Proper shipping name	Combustible liquid, n.o.s. (Distillates, Petroleum, Hydrotreated Heavy Naphthenic and Solvent Naphtha, Heavy Aromatic)
Hazard Class	Combustible liq
Packing group	III

IATA

UN Number	UN3082
Proper shipping name	Environmentally hazardous substance, liquid, n.o.s.
Hazard Class	9 L

Packing group	III

IMDG/IMO

UN Number	3082
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT
Hazard Class	9
Packing group	III
Special precautions for user -	Read safety instructions, SDS and emergency procedures before handling.
Transport Annex II of MARPOL 73/78 and the IBC Code :	Not established.

15. Regulatory information

Fedral and State Regulation	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
Other Regulation	OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) : Not regulated.
SARA 302	Not Listed
SARA 313	Not Listed

HMIS

Health Hazard	: 3
Fire Hazard	: 3
Reactivity	: 0
Personal Protection	: H

Fire :

Health Hazard	: 3
Fire Hazard	: 3
Reactivity	: 0
Specific Hazard	: ..

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 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 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.