Material Safety Data Sheet

RO Coagulant 510 (RXSOL-33-3363-250)

1. Product and Company Identifaction

Product Name	RO Coagulant 510
Part Number	RXSOL-33-3363-250

Company Details:

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

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2. Composition / informationon ingredients

Chemical Name	CAS -	EC number	Weight
1-Hydroxyethylidene-1,1-diphosphonic acid	2809-21-4	--	1–10
Sodium Bisulfite	7631-90-5	--	1

3. Hazards Identification

Signal Word	Danger
Hazard Statements	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Causes serious eye damage.
Precautionary statements response	Avoid breathing fumes, mist, vapors, or spray. Wear respiratory protection. Wear protective gloves, protective clothing, eye protection, and face protection.
Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.
Supplemental Hazard Statements	EUH019 May form explosive peroxides.
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

General advice	Show this material safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air.
Eye Contact	Flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally to ensure complete rinsing. Remove contact lenses if present and easy to do, then resume rinsing. Get medical attention if symptoms occur.
Swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Skin Contact	Remove contaminated clothing and wash the affected area with soap and water. Wash contaminated clothing before reuse.
Inhalation	If inhaled, move victim to fresh air. Seek emergency medical attention if breathing is difficult; perform artificial respiration if breathing stops.
Ingestion	If swallowed, DO NOT induce vomiting. Rinse mouth and get emergency medical attention. Do not give anything by mouth unless instructed to do so by a poison center or health care provider.

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 needed	No data available

5. Fire-fighting Measures

Flammability	May be combustible at high temperature.
Suitable extinguishing media	Use extinguishing media appropriate for the surrounding fire
Unsuitable extinguishing media	No information available
Special hazards arising from the substance or mixture	Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.
Further information	Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.
Hazardous combustion products	Carbon oxides, nitrogen oxides, sulfur oxides, phosphorous oxides
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	Stay upwind of the fire. Full protective equipment including self-contained breathing apparatus should be used. Use water to cool closed containers. Contain water runoff if possible.
Specific Hazards Arising from the Chemical	Combustion may produce toxic gases..

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Spillage	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.
Personal Protection	Evacuate the area of all non-essential personnel. Do not touch spilled material without proper protective equipment. Ventilate the area and mitigate further release if it is safe to do so. Avoid contact with eyes.
Enviromental Precaution	Do not let product enter drains. Risk of explosion.
Methods and materials for containment and cleaning	Contain spill and soak up with an inert absorbent material and place residues in a properly labeled container for disposal. Avoid discharge into sewer or surface water. Contain spill using trenches, diking, or absorption with an inert material (i.e. sand or earth). Reclaim spilled material into recovery or salvage drums or tank truck for proper disposal.

7. Handling and Storage

Advice on safe handling	Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Wash hands thoroughly after handling.
Advice on protection against fire and explosion	Keep away from open flames, hot surfaces and sources of ignition.Take precautionary measures against static discharge.
Incompatible materials	Keep away from alkalis, strong oxidizing agents and metals. Provide containment walls of adequate capacity to hold any accidental spills.
Hygiene measures	Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Precautions for safe handling	For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.
Storage conditions	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers closed when not in use.
Storage class	Storage class (TRGS 510): 3: Flammable liquids
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated
Advice on general occupational hygiene	Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

Requirements for storage	Keep in cool and store under shade.

8. Exposure controls and personal protection

Exposure controls	No specific additional engineering controls are required. Provide good natural or artificial ventilation.
Engineering Control	Adequate ventilation, eye-wash station, and emergency shower
Eye/face protection	Chemical splash goggles
Body Protection	Flame retardant antistatic protective clothing.
Skin protection	Chemical-resistant gloves and body-covering clothing
Respiratory protection	Observe published airborne exposure limits. NIOSH approved respirator should be used in accordance with OSHA respiratory protection requirements (29 CFR 1910.134).
Other Protection Measure	Handle in accordance with good industrial hygiene and safety practice.
Control of environmental exposure	Do not let product enter drains. Risk of explosion.
Thermal hazards	No data available

9. Physical and chemical properties

Physical state	Clear, liquid
Colour	Pale Yellow
Odour	Mild
Odor Threshold	Not Applicable
pH	8.0-9.5
Melting Point	No data available
Boiling Point	No data available
Flash Point	No data available
Evaporation Rate	Not Applicable
Flammability (solid, gas)	No data available
Explosive limits	No Data Available
Upper flammability or explosive limits	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Relative Vapour pressure	No data available
Density	No data available
Vapour Density	No data available
Freezing point	No data available
Specific Gravity	1.150-1.250
Partition coefficient	No data available
Explosive properties	No data available
Solubility	No data available
Ignition temperature	No information available.
Particle characteristics	No data available

10. Stability and reactivity

Reactivity	Formation of peroxides possible. Vapor/air-mixtures are explosive at intense warming.
Stability	Stable under normal conditions of storage and handling.
Possibility of hazardous reactions	No data available
Conditions to avoid	Extreme temperatures, incompatibilities
Incompatible materials	Strong acids, oxidizers
Hazardous Polymerization	Polymerization will not occur.

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - 5.400 mg/kg Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Ataxia. Respiratory disorder (RTECS) LC50 Inhalation - Rat - male and female - 7 h - > 11 mg/l - vapor (OECD Test Guideline 403) Dermal: No data available
Skin corrosion/irritation	Skin irritation with or without pain, burning, itching, redness, and swelling. Symptoms may be exacerbated by open wounds, excoriations, rashes, or other skin breaches.
Serious eye damage/eye irritation	Eye irritation with or without pain, burning, itching, redness, and discharge.
Respiratory or skin sensitization	Maximization Test - Guinea pig Result: negative (OECD Test Guideline 406)
Ingestion	Gastrointestinal distress with or without nausea, vomiting, and diarrhea. Ingestion may cause allergic reaction in sulfite-sensitive individuals.
Inhalation	Upper respiratory irritation with or without cough, watering of the eyes, and postnasal drip. Inhalation may induce or exacerbate symptoms of allergy or asthma in sulfitesensitive individuals
Carcinogenicity	No components have been identified as carcinogenic by OSHA, NTP, or IARC.
Reproductive toxicity	May damage the unborn child. May damage fertility.
Specific target organ toxicity - single exposure	No data available
Special Remarks on other Toxi Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reation, 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.
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: KN3339000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

1-Hydroxyethylidene-1,1-diphosphonic acid (HEDP)

Parameter	Result
96 hr LC50, Bluegill sunfish	>10,000 mg/L
96 hr LC50, Rainbow trout	4,900 mg/L
48 hr EC50, Daphnia magna	2,800 mg/L

Sodium bisulfite

Parameter	Result
96 hr LC50, Bluegill sunfish	>1,000 ppm
96 hr LC50, Fathead minnow	59 mg/L
96 hr LC50, Rainbow trout	>1,000 ppm
48 hr EC50, Daphnia magna	140 mg/L

Persistence and degradability	No information available
Toxicity to fish	LC50 - Pimephales promelas (fathead minnow) - 8.569 mg/l - 96 h Remarks: (IUCLID)
Toxicity to daphnia and other aquatic invertebrates	Semi-static test EC50 - Daphnia magna (Water flea) - 943 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	Semi-static test ErC50 - Pseudokirchneriella subcapitata (green algae) - > 10.000 mg/l - 72 h (OECD Test Guideline 201)
Toxicity to bacteria	Static test EC20 - activated sludge - 1.067 mg/l - 3 h (OECD Test Guideline 209)
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	No data available

13. Disposal considerations

Disposal methods	Dispose of in accordance with federal, state, and local regulations.
RCRA status	Discarded product, as sold, would not be considered a RCRA Hazardous Waste .

14. Transport information

UN number	ADR/RID:	IMDG:	IATA:
UN proper shipping name	ADR/RID:Ethers, n.o.s. (Diethyleneglycol dimethylether)		
	IMDG:Ethers, n.o.s. (Diethyleneglycol dimethylether)		
	IATA:Ethers, n.o.s. (Diethyleneglycol dimethylether)		
Transport hazard class(es)	ADR/RID:	IMDG:	IATA:
Packaging group	ADR/RID:	IMDG:	IATA:
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 IMOinstruments	No data available		

15. Regulatory information

OSHA Hazard Communication Status	Respiratory Sensitization, Category 1B Serious Eye Damage, Category 1
EPA Registration Number	Not applicable
TSCA	The ingredients of this product are listed on the Toxic Substances Control Act (TSCA) Chemical Substances Inventory.
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	A Chemical Safety Assessment has been carried out for this substance.

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 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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