Material Safety Data Sheet

Oxygen Scavenger Carbohydrazide (RXSOL-42-2541-210)

1. Product and Company Identifaction

Product Name	Oxygen Scavenger Carbohydrazide
Part Number	RXSOL-42-2541-210

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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2. Composition / informationon ingredients

Substances

Formula	CH6N4O
Molecular weight	90,08 g/mol
CAS-No.	497-18-7
EC-No.	207-837-2

Component	Classification	Concentration
1,3-diaminourea CAS-No. 497-18-7 EC-No. 207-837-2	Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1; Aquatic Chronic 2; H302, H315, H317, H411	= 100 %

3. Hazards Identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008	Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Skin sensitization (Category 1), H317 Long-term (chronic) aquatic hazard (Category 2), H411 For the full text of the H-Statements mentioned in this Section, see Section 16.

Label elements

Signal Word	Warning
Hazard statement(s)	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement(s)	P273 Avoid release to the environment. P280 Wear protective gloves. P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. P302 + P352 IF ON SKIN: Wash with plenty of water.
Supplemental Hazard information (EU)	EUH044 Risk of explosion if heated under confinement.

Reduced Labeling (= 125 ml)

Signal Word	Warning
Hazard Statements(s)	H317 May cause an allergic skin reaction.
Precautionary Statements(s)	P280 Wear protective gloves. P302 + P352 IF ON SKIN: Wash with plenty of water.
Supplemental Hazard information (EU)	EUH044 Risk of explosion if heated under confinement.
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	Consult a physician. Show this material safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Flush eyes with water as a precaution.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects, both acute and delayed	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

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	Carbon oxides Nitrogen oxides (NOx)
Advice for firefighters	Wear self-contained breathing apparatus for firefighting if necessary.
Further information	No data available

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and material for containment and cleaning up	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling	Avoid contact with skin and eyes. Avoid formation of dust and aerosols.
Advice on protection against fire and explosion	Provide appropriate exhaust ventilation at places where dust is formed.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	
Storage conditions	Keep container tightly closed in a dry and well-ventilated place. Store in cool place.
Storage class	Storage class (TRGS 510): 11: Combustible Solids

Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls and personal protection

Eye/face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.
Body Protection	Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Control of environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. Physical and chemical properties

Physical state	Crystalline
Color	White
Odor	Odorless
Melting point/freezing point	Melting point/range: 150 - 153 °C - lit.
Initial boiling point and boiling range	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Flash point	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
pH	6,7 - 8,3
Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
Water solubility	Soluble
Partition coefficient: n-octanol/water	No data available
Vapor pressure	16 hPa at 20 °C
Density	1,020 g/cm3 at 20 °C
Relative density	No data available
Relative vapor density	No data available
Particle characteristics	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Other safety information	No data available

10. Stability and reactivity

Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Strong oxidizing agents, Strong acids, Copper, Zinc, Nickel, Lead, Brass

Hazardous decomposition products	In the event of fire: see section 5

11. Toxicological information

Acute toxicity	LD50 Oral - Rat - female - 311 mg/kg Acute toxicity estimate Oral - 311 mg/kg (Calculation method) Inhalation: No data available Dermal: No data available
Skin corrosion/irritation	Remarks: No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	Result: negative Remarks: Histidine reversion (Ames)
Carcinogenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	RTECS: FF2625000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological information

Toxicity	
Toxicity to fish	LC50 - Lepomis macrochirus (Bluegill) - 190,0 mg/l - 96,0 h
Toxicity to daphnia and other aquatic invertebrates	LC50 - Daphnia magna (Water flea) - 96 mg/l - 48 h
Toxicity to algae	EC50 - Desmodesmus subspicatus (green algae) - 9,5 mg/l - 72 h
Persistence and degradability	
Biodegradability	Result: - Not readily biodegradable.
Bioaccumulative potential	No data available
Mobility in soil	No data 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 Product	No data available
Other adverse effects	Toxic to aquatic life with long lasting effects.

13. Disposal considerations

Waste treatment methods

Product	Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.
Contaminated packaging	Dispose of as unused product.

14. Transport information

UN number	ADR/RID: 3077	IMDG: 3077	IATA: 3077	

UN proper shipping name	ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3-diaminourea) IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3-diaminourea) IATA: Environmentally hazardous substance, solid, n.o.s. (1,3-diaminourea)
Transport hazard class(es)	ADR/RID: 9 IMDG: 9 IATA: 9
Packaging group	ADR/RID: III IMDG: III IATA: III
Environmental hazards	ADR/RID: yes IMDG Marine pollutant: yes IATA: yes
Further information	EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.Packages smaller than or equal to 5 kg / L , not dangerous goods of Class 9

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture	This material safety data sheet complies with the requirements of 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 substances.	ENVIRONMENTAL HAZARDS
Chemical Safety Assessment	For this product a chemical safety assessment was not carried out

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.