Material Safety Data Sheet

SUPER HYDRO 3X (RXSOL-43-4143-210)

1. Product and Company Identifaction

Porduct Name	Super Hydro 3X
Part Number	RXSOL-43-4143-210

Blend of Corrosion Inhibitor - Oxygen Scavenger - Biocide

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

Prouct Name	CAS Number	EC Number	Weight Percentage	Classification according to Regulation (EC) No. 1272/2008
Quaternary Ammonium Compounds, Benzyl C12-C16 Alkyldimethyl Chlorides	68424-85-1	939-253-5	10 - 25	H302 H314
Ammonium Hydrogensulphite	10192-30-0	233-469-7	10 – 30	Eye Irrit. 2, H319
2-(Methoxymethylethoxy) Propanol	34590-94-8	252-104-2	1 – 10	Not classified
Methanol	67-56-1	200-659-6	1 - 10	Acute Tox. 4 (Oral), H302

3. Hazards Identification

Classification according to Regulation (EC) No. 1272/2008	Acute toxicity (oral), Category 4 H302 Skin corrosion/irritation, Category 1, Sub-Category 1B H314 Serious eye damage/eye irritation, Category 1 H318 Hazardous to the aquatic environment — Acute Hazard, Category 1 H400 Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411 Full text of H- and EUH-statements: see section 16
Adverse physicochemical, human health and environmental effects	Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Label elements

Signal word	Danger
Contains	Ethane-1,2-diol, methanol, Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides
Hazard statements	H302 - Harmful if swallowed. H314 - Causes severe skin burns and eye damage. H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements	P264 - Wash hands thoroughly after handling. P280 - Wear eye protection, protective clothing, protective gloves. P303+P361+P353+P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.. Immediately call a POISON CENTER or doctor. P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. P321 - Specific treatment (see supplemental first aid instruction on this label). P391 - Collect spillage.
EUH-statements	EUH031 - Contact with acids liberates toxic gas.
Other hazards	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

4. First Aid Measures

General	Call a physician immediately.
Iinhalation	Remove person to fresh air and keep comfortable for breathing.
Skin contact	Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
Ingestion	Rinse mouth. Do not induce vomiting. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact	Burns
Symptoms/effects after eye contact	Serious damage to eyes
Symptoms/effects after ingestion	Burns

5. Fire-fighting Measures

Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide.
Special hazards arising from the substance or mixture	Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Hazardous decomposition products in case of fire	Toxic fumes may be released.
Advice for firefighters	Spray to keep fire-exposed containers cool.Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6. Accidental Release Measures

Emergency procedures	Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Environmental precautions	Avoid release to the environment
For containment	Collect spillage
Methods for cleaning up	Take up liquid spill into absorbent material
Other information	Dispose of materials or solid residues at an authorized site.
Reference to other sections	For further information refer to section 13.

7. Handling and Storage

Precautions for safe handling	Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.
Hygiene measures	Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
Storage conditions	Store locked up. Store in a well-ventilated place. Keep cool.
Specific end use(s)	No additional information available

8. Exposure controls and personal protection

(2-methoxymethylethoxy)propanol (34590-94-8)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	(2-Methoxymethylethoxy)-propanol
IOEL TWA	308 mg/m³
IOEL TWA [ppm]	50 ppm
Remark	Skin

(2-Methoxymethylethoxy)propanol (34590-94-8)

Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
United Kingdom - Occupational Exposure Limits	
Local name	(2-Methoxymethylethoxy)-propanol
IOEL TWA	308 mg/m³
IOEL TWA [ppm] (OEL TWA) [2]	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Ethane-1,2-diol (107-21-1)

EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Ethylene glycol
IOEL TWA	52 mg/m³
IOEL TWA [ppm] (OEL TWA) [2]	20 ppm
IOEL STEL	104 mg/m³
IOEL STEL [ppm]	40 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC

United Kingdom - Occupational Exposure Limits

Local name	Ethane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m³ particulate 52 mg/m³ vapour
IOEL TWA [ppm] (OEL TWA) [2]	20 ppm vapour
IOEL STEL(OEL STEL)	104 mg/m³ vapour
WEL STEL (OEL STEL)	40 ppm vapour
WEL STEL (OEL STEL) [ppm]	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Remark	Skin
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Methanol (67-56-1)

EU - Indicative Occupational Exposure Limit (IOEL

Local name	Methanol
IOEL TWA	260 mg/m³
IOEL TWA [ppm]	200 ppm

Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC

Occupational Exposure Limits

Local name	Methanol
WEL TWA (OEL TWA) [1]	266 mg/m³
WEL TWA (OEL TWA) [2]	200 ppm
WEL STEL (OEL STEL)	333 mg/m³
WEL STEL (OEL STEL) [ppm]	250 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

Recommended monitoring procedures	No additional information available
Air contaminants formed	No additional information available
DNEL and PNEC	No additional information available
Control banding	No additional information available

Exposure controls

Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station.

Safety glasses

Type	Field of application	Characteristics	Standard
Safety glasses		With side shields	EN 166

Skin protection

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR), Butyl rubber	3 (> 60 minutes)	Nitrile 0.4 mm; Butyl 0.7 mm		EN ISO 374

Respiratory protection

Device	Filter type	Condition	Standard
	Type A - High-boiling (>65 °C) organic compounds, Filter P (white)		EN 143, EN 14387

9. Physical and chemical properties

Physical state	liquid
Colour	Pale yellow.
Odor	Characteristic odour
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Not available
Explosive limits	Not available
Lower explosive limit (LEL)	Not available
Upper explosive limit (UEL)	Not available
Flash point	60 – 93 °C
Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	4 – 6

Viscosity, kinematic	Not available
Viscosity, dynemic	10 cP 20 °C, S-18 Spindle, 100 RPM
Solubility	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50 °C	Not available
Density	Not available
Relative density	Not available
Relative vapour density at 20 °C	Not available
Particle size	Not applicable
Particle size distribution	Not applicable
Particle shape	Not applicable
Particle aspect ratio	Not applicable
Particle aggregation state	Not applicable
Particle agglomeration state	Not applicable
Particle specific surface area	Not applicable
Particle dustiness	Not applicable
Information with regard to physical hazard classes	No additional information available
Other safety characteristics	No additional information available

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Contact with acids liberates toxic gas.
Conditions to avoid	None under recommended storage and handling conditions (see section 7).
Incompatible materials	Acids
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

Acute toxicity (oral)	Harmful if swallowed.
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
SUPER HYDRO 3X	
ATE CLP (oral)	
Ammonium Hydrogensulphite (10192-30-0)	
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.5 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
(2-methoxymethylethoxy)propanol (34590-94-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 19020 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	9510 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 3000 mg/m³ Source: ECHA
Ethane-1,2-diol (107-21-1)	
LD50 oral rat	7712 mg/kg bodyweight Animal: rat
LD50 dermal	3500 mg/kg bodyweight Animal: mouse

LC50 Inhalation - Rat	2500 mg/m
Methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg bodyweight Animal: rat
LD50 dermal	17100 mg/kg bodyweight
LC50 Inhalation - Rat	43700 mg/m³
Quaternary Ammonium Compounds, Benzyl C12-C16 (even numbered)-alkyldimethyl chlorides (68424-85-1)	
LD50 oral rat	795 mg/kg bodyweight
LD50 dermal rabbit	3412.5 mg/kg bodyweight
LC50 Inhalation - Rat	0.22 – 0.28 mg/l/4h

Skin corrosion/irritation	Causes severe skin burns. pH: 4 – 6.
Serious eye damage/irritation	Causes severe skin burns. pH: 4 – 6
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified

Ethane-1,2-diol (107-21-1)	
NOAEL (chronic, oral, animal/male, 2 years)	1500 mg/kg bodyweight Animal: mouse, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
Reproductive toxicity	Not classified
methanol (67-56-1)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: mouse, Animal sex: male
STOT-single exposure	Not classified
methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure	Not classified
(2-methoxymethylethoxy)propanol (34590-94-8)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: other:KANPOGYO No.700, YAKUHATSU No. 1039.61, and KIKYKU No. 1014
NOAEL (dermal, rat/rabbit, 90 days)	2850 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
Ethane-1,2-diol (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified

12. Ecological information

Toxicity	NA
Ecology - general	Very toxic to aquatic life. Toxic to aquatic life with long lasting effects
Hazardous to the aquatic environment, short-term (acute)	Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	Toxic to aquatic life with long lasting effects

Ammonium Hydrogensulphite (10192-30-0)

LC50 - Fish [1]	464 – 1000 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	89 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	74.9 mg/l Freshwater invertebrates

EC50 72h - Algae [1]	43.8 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC (chronic)	> 10 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	? 316 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'
NOEC chronic crustacea	8.41 mg/l Freshwater invertebrates
NOEC chronic algae	28 mg/l Freshwater algae
(2-methoxymethylethoxy)propanol (34590-94-8)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Poecilia reticulata
EC50 - Other aquatic organisms [1]	1930 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa
EC50 72h - Algae [1]	> 969 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 969 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
NOEC (chronic)	? 0.5 mg/l Test organisms (species): Daphnia magna Duration: '22 d'
Ethane-1,2-diol (107-21-1)	
LC50 - Fish [1]	72860 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 13900 mg/l Test organisms (species): Daphnia magna
EC50 96h - Algae [1]	3536 mg/l Test organisms (species): other:grenn algae
EC50 96h - Algae [2]	6500 – 13000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	? 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'
NOEC chronic fish	15380 mg/l
NOEC chronic crustacea	> 15000 ml/l
Methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	18620 mg/l Daphnia magna
EC50 96h - Algae [1]	? 22000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	208 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic fish	450 mg/l
NOEC chronic crustacea	122 mg/l
Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides (68424-85-1)	
LC50 - Fish [1]	0.28 mg/l
LC50 - Fish [2]	0.515 mg/l Lepomis macrochirus
EC50 - Crustacea [1]	0.016 mg/l Fresh water
EC50 - Crustacea [2]	0.016 mg/l Fresh water
EC50 72h - Algae [1]	0.016 mg/l Fresh water
EC50 72h - Algae [2]	0.207 mg/l Marine water
EC50 96h - Algae [1]	0.049 mg/l
NOEC chronic fish	0.0322 mg/l
NOEC chronic crustacea	0.0048 mg/l
NOEC chronic algae	0.009 mg/l Freshwater

Persistence and degradability

(2-methoxymethylethoxy)propanol (34590-94-8)	
Biodegradation	100 % Readily biodegradable
Ethane-1,2-diol (107-21-1)	
Biodegradation	100 % Readily biodegradable
Bioaccumulative potential	
Ammonium hydrogensulphite (10192-30-0)	

Bioaccumulative potential	No bioaccumulation data available
(2-methoxymethylethoxy)propanol (34590-94-8)	
Partition coefficient n-octanol/water (Log Pow)	0.004
Bioaccumulative potential	Not established.
Ethane-1,2-diol (107-21-1)	
Partition coefficient n-octanol/water (Log Pow)	-1.36
Bioaccumulative potentia	No bioaccumulation potential.
Methanol (67-56-1)	
Partition coefficient n-octanol/water (Log Pow)	-0.77 Source: HSDB,CHemIDplus
Mobility in soil	
(2-methoxymethylethoxy)propanol (34590-94-8)	
Surface tension	68.7 mN/m
Ethane-1,2-diol (107-21-1)	
Mobility in soil	0.2 Source: HSDB
Methanol (67-56-1)	
Mobility in soil	2.75 Source: HSDB
Results of PBT and vPvB assessment	
HYDRO 3X	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
Component	
Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides (68424-85-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
ammonium hydrogensulphite (10192-30-0)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
(2-methoxymethylethoxy)propanol (34590-94-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
methanol (67-56-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
ethane-1,2-diol (107-21-1)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
Endocrine disrupting properties	No additional information available
Other adverse effects	No additional information available

13. Disposal considerations

Waste treatment Method Dispose of contents/container in accordance with licensed collector’s sorting instructions.

14. Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
UN number or ID number				
UN 3265	UN 3265	UN 3265	UN 3265	UN 3265
UN proper shipping name				

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides)	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides)
Transport document description				
UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3265 CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS : Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides), 8, II, (E), ENVIRONMENTALLY HAZARDOUS	UN 3265 CORROSIVE LIQUID, ACIDIC,		