Material Safety Data Sheet

BRINE CORROSION INHIBITOR (RXSOL-81-4049-210)

1. Product and Company Identifaction

Product Name	: BRINE CORROSION INHIBITOR
Part Number	: RXSOL-81-4049-210

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

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, Fujairah UAE, Muscat, Nairobi and CANADA

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2. Composition / informationon ingredients

Name of Substance	Cas Number	EINECS No	Wt.%	Symbol
Sodium Borate Anhydrous	1330-43-4	215-540-4	5 -10%	Xi
Sodium Hydroxide	310-73-2	215-185-5	1- 2%	C
Proprietory Blend of Inhibitor	---	---	21-30%	

3. Hazards Identification

Signal Word	Warning
Hazard Statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H360 May damage fertility or the unborn child.
Precautionary statements - prevention	P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P103 Read carefully and follow all instructions. P201 Obtain special instructions before use. P280 Wear protective gloves, protective clothing, eye protection and face protection. P264 Wash all exposed external body areas thoroughly after handling.
Precautionary statements - response	P308+P313 IF exposed or concerned: Get medical advice/ attention. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of water. P332+P313 If skin irritation occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

4. First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
Inhalation:	If inhaled, If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Ingestion:	If swallowed, do not induce vomiting. Allow victim to rinse his mouth and then to drink 2-4 cupfuls of water. Never give anything by mouth to an unconscious person. Call a physician.
Notes to Physicians	Treat symptomatically.

5. Fire-fighting Measures

Flammability	Non Flammable
Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Protective Equipment	Use personal protective equipment.
Advice for firefighters	Wear self-contained breathing apparatus. Wear full protective equipment.
Specific extinguishing methods	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures	Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. Wear suitable personal protective equipment.Respiratory protective equipment.
Enviromental Precaution	Do not allow contact with soil, surface or ground water.If the products get into drains, inform the relevant authorities immediately.
Methods and materials for containment and cleaning up	Stop leak if safe to do so. Contain spillage, and then collect with noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

7. Handling and Storage

Advice on safe handling	Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
Storage	Do not store near acids. Keep out of reach of children. Store in suitable labeled containers. Storage temperature : 10 °C to 50 °C
Advice on general occupational hygiene	Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas.

8. Exposure controls and personal protection

Engineering Control	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use. Employers may need to use multiple types of controls to prevent employee overexposure.

Personal Protection	Eye & face protection : Safety glasses with unperforated side shields may be used where continuous eye protection is desirable, as in laboratories; spectacles are not sufficient where complete eye protection is needed such as when handling bulk-quantities, where there is a danger of splashing, or if the material may be under pressure. Chemical goggles.whenever there is a danger of the material coming in contact with the eyes; goggles must be properly fitted. Full face shield (20 cm, 8 in minimum) may be required for supplementary but never for primary protection of eyes; these afford face protection. Alternatively a gas mask may replace splash goggles and face shields. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Hand protection : Wear the following personal protective equipment: Standard glove type. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Skin protection : Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Occupational Exposure Limits (OEL)

Ingredients	CAS No	Form of exposure	Value	UK EH40 OES (table 2)
Sodium Borate Anhydrous	1330-43-4	TWA	1 mg/m3	1 ppm
		STEL	Not Avaialble	NA
Sodium Hydroxide	310-73-2	TWA	Not Avaialble	NA
		STEL	Not Avaialble	NA

Emergency Limits Ingredient

Ingredients	CAS No	TEEL1	TEEL2	TEEL3
Sodium Borate Anhydrous	1330-43-4	6 mg/m3	88 mg/m3	530 mg/m3
Sodium Hydroxide	310-73-2	TWA	Not Avaialble	NA

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.



Gloves



Suit

9. Physical and chemical properties

Form	Liquid
Colour	Yellow
Odour	Not Available
Odour threshold	Not Available
Boiling point and boiling range	100°C
Flash Point	Non FlammableNo
Freezing Point	Not Available
pH	11.5 -14
Evaporation rate	Not available
Flammability (solid, gas)	Not Available
Upper explosion limit	Not Available
Lower explosion limit	Not Available
Explosive properties	Not Available
Vapor pressure	Not Available
Relative vapor density	Not Available
Relative density	1.155 - 1.190 (25?C)
Water solubility	Miscible
Solubility in other solvents	Not Available
Partition coefficient: octanol	Not Available
Autoignition temperature	Not Available
Thermal decomposition	Not Available

Viscosity, kinematic	Not Available
Explosive properties	Not Available
Oxidizing properties	Not Available
Molecular weight	Not Available
VOC	Not Available

10. Stability and reactivity

Recativity	None
Stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Incompatible materials	Avoid to contact with strong acids Avoid to contact with oxidizing agents. Store away from aldehydes.
Hazardous Decomposition	Decomposition products may include the following materials: Sulphurous oxides (SOx)
Condition to Avoid	None Known
Polymerization	Will not occur.

11. Toxicological information

Route of Exposure	Inhalation, Eye contact, Skin contact
Eyes	Causes serious eye damage.
Skin	Causes severe skin burns.
Ingestion	Causes digestive tract burns
Inhalation	Inhalation of vapours leads to irritation of respiratory tract and mucous membranes, headache, nausea, dizziness, vomiting. Sensitisation possible through inhalation
Chronic Exposure	Health injuries are not known or expected under normal use.
Acute oral toxicity	Oral (man) LDLo: 709 mg/kg[2]
Acute inhalation toxicity	No data available
Acute dermal toxicity	No data available
Classification	The classification was made by the conventional (calculation) method of Dangerous Preparations Directive(1999/45/EC)

12. Ecological information

Environmental Effects	No data available

Toxicity to fish

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	96h	Algae or other aquatic plants	2.6-21.8mg/l	4

Toxicity to daphnia and others

Endpoint	Test Duration (hr)	Species	Value	Source
EC50	48h	Crustacea	34.59-47.13mg/l	4
EC50(ECx)	48h	Crustacea	34.59-47.13mg/l	4
LC50	96h	Fish	144-267mg/l	4

Toxicity to algae	No data available
Biodegradability	Low (28 d)
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available

13. Disposal considerations

Remarks	Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.
Waste Disposal	The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility

14. Transport information

Not classified as hazardous forany mode of Transport

	DOT	TDG Classification	IMDG	IATA
UN Number	Not Regulated For transort	Not Regulated For transort	Not Regulated For transort	Not Regulated For transort
Proper shipping name	Not Regulated For transort	Not Regulated For transort	Not Regulated For transort	Not Regulated For transort
Transport hazard class(es)	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Packing Group	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Environmental hazards	NO	NO	NO	NO

15. Regulatory information

US Federal Regulations	All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects
Further information	FOR INDUSTRIAL USE. Water Hazard Class:. WGK 1.

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.

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