Material Safety Data Sheet

FIRE PROTECTION (RXSOL-64-2614-001)

http://www.ostrem.com/msds/English/S762%20MSDS.pdf

1. Product and Company Identifaction

Product Name	RXSOL-51-6004-025
Product Type	No. 10 Boiler Compound

Company Details:

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

Phone	+91 22 65113333 / 5555 / 9999
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	**mail@rxmarine.com**

2. Composition / informationon ingredients

INGREDIENT	%W/W	CAS number
ethylene glycol	15-40	107-21-1
sodium hydroxide (50%)	10-30	1310-73-2
methanol	7-13	67-56-1
methylene phosphonic acid	1-5	6419-19-8
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	5-10	64-02-8

3. Hazards Identification

Corrosive liquid. Causes burns. Harmful if swallowed. Combustible liquid.

4. First Aid Measures

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Induce vomiting only on the direct advice of a poison control centre. Drink 1-2 glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.
Eye contact	Flush with plenty of water for at least 15 minutes. Get medical attention.
Skin contact	Remove contaminated clothing and flush with plenty of water.

5. Fire-fighting Measures

Flash point (test method)	39C(TCC)
Flammable limits (%)	Not applicable
Lower	Not applicable.
Upper	Not applicable
Fire extinguishing substances	Use dry chemicals, carbon dioxide, water spray or foam.
Autoignition temperatures	Not applicable
Hazardous combustion products	May liberate carbon monoxide, carbon dioxide and Sulphur dioxide.
Explosion data	
Sensitivity to mechanical impact	Not applicable
Sensitivity to static discharge	Not applicable
Special firefighting procedures	As for surrounding fire.

6. Accidental Release Measures

Personal precautions	Wear appropriate protective equipment.
Environmental precautions	Prevent from entering sewers, waterways or low areas.
Methods for cleaning up	Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. Handling and Storage

Handling	Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage	Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

8. Exposure controls and personal protection

Engineering controls	Provide exhaust ventilation to keep airborne levels below recommended exposure limits.
Respiratory protection	Not normally necessary. An N95 NIOSH respirator may be worn.
Eye protection	Chemical goggles. Wear a face shield if splashing hazards exists.
Other protection	Not normally necessary.

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
ethylene glycol	TLV CEIL: 100mg/m3 8 hours		
sodium hydroxide (50%)	2 mg/m3 Ceil.		
methanol	CAD AB OEL 200 ppm (262mg/m3)		
methylene phosphonic acid	Not available		
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	Not available		

9. Physical and chemical properties

Physical state	Liquid
Solubility in water	Complete
Boiling point	Not available
Vapour pressure	Not available
Vapour density	Not available
Evaporation rate	Not available
Freezing point	-45C
Odour threshold	Not available
Sp. Gravity	1.176
pH	1% Solution: 12.4
Appearance & odour	Clear, colourless liquid with slight ammonia odour

10. Stability and reactivity

STABILITY	Stable
Conditions of instability	Not available
Incompatibility	( ) Water (X) Oxidizers (X) Acid (X) Base (X) Other: chlorinated hydrocarbons, aluminum, tin, lead, zinc, copper.
Conditions of reactivity	Not available
Hazardous decomposition products	Not available

11. Toxicological information

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation	Corrosive to respiratory system.
Ingestion	Harmful if swallowed. Causes burns to mouth, throat and stomach.
Eye contact	Causes burns.
Skin contact	Causes burns.
Skin absorption	Not available

POTENTIAL CHRONIC HEALTH EFFECTS	
Inhalation	Repeat or prolonged exposure may cause damage to lungs.
Ingestion	Not available
Eye contact	Not available
Skin contact	Not applicable
Skin absorption	Not applicable
Irritancy of product	See WHMIS criteria
Sensitization of product	Not available
Carcinogenicity:	
IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
Reproductive toxicity	No known significant effects.
Teratogenicity	No known significant effects.
Mutagenicity	No known significant effects.
Synergistic product	Not available

HAZARDOUS INGREDIENTS	CAS NO	TOXICITY DATA
ethylene glycol	107-21-1	LD50 oral rat: 4700 m LD50 dermal rabbit: 9
sodium hydroxide (50%)	1310-73-2	LD50 oral (rabbit) 365
methanol	67-56-1	LDL0 oral human: 300 LD50 oral rabbit: 12,8 LC50 inhalation rat: 6
methylene phosphonic acid	6419-19-8	LD50 Oral (rat) 2910 LD50 Dermal (rabbit)
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	64-02-8	LD50 Oral (rat) >2000 LD50 Dermal (rabbit)

12. Ecological information

Ecotoxicological information	Not available
Other information	

13. Disposal considerations

Waste disposal Disposal of all waste must be done according to local, provincial and federal regulations.

14. Transport information

TDG classification CORROSIVE LIQUID, FLAMMABLE, N.O.S. (SODIUM HYDROXIDE, METHANOL); Class 8 (3); UN 2920; PG II

15. Regulatory information

WHMIS	E	Corrosive Material
	B3	Combustible Material
	D2A	Material Causing Other Toxic Effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. Other information

The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of workplace risk as required by other health and safety legislation.

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http://www.ostrem.com/msds/English/S772%20MSDS.pdf

1. Product and Company Identifaction

Product Name	RXSOL-51-6004-025
Product Type	PBT-20 Polymer Boiler Treatment

Company Details:

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

Phone	+91 22 65113333 / 5555 / 9999
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Email	**mail@rxmarine.com**

2. Composition / informationon ingredients

INGREDIENT	%W/W	CAS number
Polyacrylic Acid Sodium Salt	15-40	Not available

3. Hazards Identification

Eye irritant. Harmful if swallowed.

4. First Aid Measures

Inhalation	Remove from exposure. Get fresh air.

Ingestion	Do not induce vomiting. If irritation persists, seek medical attention.
Eye contact	Flush with plenty of water for 15 minutes. Get medical attention if irritation persists.
Skin contact	Remove contaminated clothing and flush with plenty of water.

5. Fire-fighting Measures

Flash point (test method)	Not applicable
Flammable limits (%)	Non-flammable
Lower	Not applicable.
Upper	Not applicable
Fire extinguishing substances	Use dry chemicals, carbon dioxide, water spray or foam.
Autoignition temperatures	Not applicable
Hazardous combustion products	May liberate carbon monoxide, carbon dioxide and Sulphur dioxide.
Explosion data	
Sensitivity to mechanical impact	Not applicable
Sensitivity to static discharge	Not applicable
Special firefighting procedures	As for surrounding fire.

6. Accidental Release Measures

Personal precautions	Wear appropriate protective equipment.
Environmental precautions	Prevent from entering sewers, waterways or low areas.
Methods for cleaning up	Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. Handling and Storage

Handling	Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage	Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

8. Exposure controls and personal protection

Engineering controls	Special ventilation requirements not normally necessary
Respiratory protection	Not normally necessary.
Eye protection	Not normally necessary. Safety glasses may be worn.

Other protection	Not normally necessary.

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
polyacrylic sodium salt	Not applicable		

9. Physical and chemical properties

Physical state	Liquid
Solubility in water	Complete
Boiling point	Not available
Vapour pressure	Not available
Vapour density	Not available
Evaporation rate	Not available
Freezing point	0C
Odour threshold	Not available
Sp. Gravity	1.12
pH	8-8.5
Appearance & odour	light brown liquid with a slight odour

10. Stability and reactivity

STABILITY	Stable
Conditions of instability	Not available
Incompatibility	( ) Water (X) Oxidizers ( ) Acid ( ) Base ( ) Other
Conditions of reactivity	Not available
Hazardous decomposition products	Not available

11. Toxicological information

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation	No known significant effects
Ingestion	No known significant effects
Eye contact	May cause temporary discomfort and redness
Skin contact	May cause temporary discomfort
Skin absorption	Not available
POTENTIAL CHRONIC HEALTH EFFECTS	
Inhalation	No known significant effects

Ingestion	Not available
Eye contact	Not available
Skin contact	Prolonged contact may cause discomfort
Skin absorption	Not applicable
Irritancy of product	See WHMIS criteria
Sensitization of product	Not available
Carcinogenicity:	
IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
Reproductive toxicity	No known significant effects.
Teratogenicity	No known significant effects.
Mutagenicity	No known significant effects.
Synergistic product	Not available

HAZARDOUS INGREDIENTS	CAS NO	TOXICITY DATA
None		

12. Ecological information

Ecotoxicological information	Not available
Other information	

13. Disposal considerations

Waste disposal	Disposal of all waste must be done according to local, provincial and federal regulations.

14. Transport information

TDG classification	Not Regulated

15. Regulatory information

WHMIS	D2B	Material Causing Other Toxic Effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. Other information

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http://www.ostrem.com/msds/English/S768%20MSDS.pdf

1. Product and Company Identifaction

Product Name	RXSOL-51-6004-025
Product Type	E-40 Boiler Water Blend

Company Details:

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

Phone	+91 22 65113333 / 5555 / 9999
Fax	+91 22 2781 1318 :::AOH :0091 9821214367
Email	**mail@rxmarine.com**

2. Composition / informationon ingredients

INGREDIENT	%W/W	CAS number
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	60-100	64-02-8

3. Hazards Identification

Corrosive liquid. Causes burns. Harmful if swallowed.

4. First Aid Measures

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Induce vomiting only on the direct advice of a poison control centre. Get medical attention.
Eye contact	Flush with plenty of water for at least 15 minutes. Get medical attention.
Skin contact	Remove contaminated clothing and flush with plenty of water.

5. Fire-fighting Measures

Flash point (test method)	Not applicable
Flammable limits (%)	Non-flammable
Lower	Not applicable.
Upper	Not applicable
Fire extinguishing substances	Use extinguishing media appropriate for surrounding fire.
Autoignition temperatures	Not applicable
Hazardous combustion products	May liberate carbon oxides and nitrogen oxides.
Explosion data	
Sensitivity to mechanical impact	Not applicable
Sensitivity to static discharge	Not applicable
Special firefighting procedures	As for surrounding fire. Fire fighters should wear full protective clothing and self contained breathing equipment.

6. Accidental Release Measures

Personal precautions	Wear appropriate protective equipment.
Environmental precautions	Prevent from entering sewers, waterways or low areas.
Methods for cleaning up	Isolate hazard area and restrict access. Small spills: soak up with inert absorbent material and scoop into containers. Large spills: prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. Handling and Storage

Handling	Do not ingest. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage	Keep out of reach of children. Keep container tightly closed. Store in a cool, dry area.

8. Exposure controls and personal protection

Engineering controls	Provide exhaust ventilation to keep airborne levels below recommended exposure limits.
Respiratory protection	If exposure exceeds occupational exposure limits, use an appropriate NIOSH approved respirator
Eye protection	Chemical goggles. Wear a face shield if splashing hazards exists.
Other protection	Wear protective clothing as necessary to prevent skin contact.

Exposure limits:

INGREDIENT	ACGIH	OSHA	Other
Tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	Not available		

9. Physical and chemical properties

Physical state	Liquid
Solubility in water	Complete
Boiling point	100C
Vapour pressure	Not available
Vapour density	Not available
Evaporation rate	Not available
Freezing point	Not available
Odour threshold	Not available
Sp. Gravity	1.3
pH	1% Solution: 13.5
Appearance & odour	clear pale solution

10. Stability and reactivity

STABILITY	Stable
Conditions of instability	Not available
Incompatibility	( ) Water (X) Oxidizers ( ) Acid ( ) Base ( ) Other
Conditions of reactivity	Not available
Hazardous decomposition products	produces hydrogen in the presence of aluminum.

11. Toxicological information

POTENTIAL ACUTE HEALTH EFFECTS

Inhalation	Irritating to respiratory system.
Ingestion	May be harmful if swallowed.
Eye contact	May cause mild to severe irritation such as stinging, tearing, redness and swelling of the eyes.
Skin contact	May cause skin irritation.

Skin absorption	Not available
POTENTIAL CHRONIC HEALTH EFFECTS	
Inhalation	Repeat or prolonged exposure may cause damage to lungs.
Ingestion	Not available
Eye contact	Not available
Skin contact	Not available
Skin absorption	Not available
Irritancy of product	See WHMIS criteria
Sensitization of product	Not available
Carcinogenicity:	
IARC (1, 2A or 2B)	No known significant effects.
ACGIH: (A1, A2 or A3)	No known significant effects.
Reproductive toxicity	No known significant effects.
Teratogenicity	No known significant effects.
Mutagenicity	No known significant effects.
Synergistic product	Not available

HAZARDOUS INGREDIENTS	CAS NO	TOXICITY DATA
tetrasodium salt of ethylene diamine tetraacetic acid (EDTA)	64-02-8	LD50 Oral (rat) >200 LD50 Dermal (rabbit)

12. Ecological information

Ecotoxicological information	Not available
Other information	

13. Disposal considerations

Waste disposal	Disposal of all waste must be done according to local, provincial and federal regulations.

14. Transport information

TDG classification	CORROSIVE LIQUID, N.O.S. (TETRASODIUM EDTA SOLUTION); Class 8; UN 1760; PG III

15. Regulatory information

WHMIS	E	Corrosive
	D2B	Other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

16. Other information

The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of workplace risk as required by other health and safety legislation.