Material Safety Data Sheet

DEICING fluid (RXSOL-36-8200-210)

1. Product and Company Identifaction

Product Name	DEICING fluid
Part Number	RXSOL-36-8200-220

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

Stock Point : Mumbai, Kolkata, Kandla, Chennai, Visakhapatnam, Fujairah

Phone	+91 22 27815540 / 41 / 42
Fax	+91 22 2781 1318
Email	mail@rxmarine.com
Website	www.rxmarine.com

2. Composition / informationon ingredients

Component	EC No	**CAS-No**	**Weight %**	Classification
2.METHYLPROPAN-2 OL	200-889-7	75.65.0	1%	F,R11 Xn, R 20
METHANOL	200-659-7	87.56.1	5%	F,R 11TR23/24/25,R39/23/24/25
Propylene Glycol	200-338-0	57.55.6	>80	F,R11 Xn, R 20

3. Hazards Identification

Signal Word	:	Flammable
Hazard Statements	:	Highly flammable Toxic by Inhalation, in contact with skin and it swallowed.
Label Elements	:	Tixic, danger of very derious irreversible effects through inhalation, in contact with skin and it swallowed.
Environmental hazards	:	Environmental effects Dangerous for the environment Very toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment. T,R 23,/24/25, R 39/23/24/25 F,R 11

4. First Aid Measures

Inhalation	Remove victim immediately from source of expourse. Provide Rest, warmth and fresh air.Get medical attention. If Respiratory problem artificial Respration / Oxygen.
Ingestion	DOES NOT INDUCE VOMITING, Rinse mouth thoroughly, Drink plenty of water, Get medical attention immediately.NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUID
Skin Contact	Wash the skin immediately with soap and water. Get medical attention promptly, if symtoms occur after washing.
Eye Contact	Properly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly, if symptoms occur after washing.

5. Fire-fighting Measures

Extinguishing Media	Fiire can be extinguished using : Water spray, feg or mist.Alcohol resistant foam. Dry Chemicals,sand, dolomite etc.
Special Fire Fighting Procedure	Use supplied air respirator if product is involved in a fire. Cool containers exposed to flames with water until well until well after the fire is out.
Specific Hazard	Vapours / gases/ fumes of Carbon Dioxide (CO 2). Carbon Monoxide (CO)

6. Accidental Release Measures

Personal Precaution	Wear suitable protective clothing, gloves and safety goggles.
Enviroment Precaution	Dike to prevent enter any sewer or waterway.
Spill Clean Method	Extingush all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate,Absorb in vermiculite, dry sand or earth and place into containers.

7. Handling and Storage

Usage Precautions	Keep away from heat, sparks and open flame. Ventilate well. avoid breathing vapours. Use approved respirator if ait contamination is above accepted level. Avoid spilling,skin and eye contact.
Storage Precaution	The drums should be stored with their seal intact, in conditions that avoid extremes of temperatures. Bulk deliveries should be stored in carbon steel tanks. Under these conditions the shelf life of the product shouls be approximately two years.
Storage Class	Flammable liquid srorage. Toxic storage.

8. Exposure controls and personal protection

Name	Std	LT-ppm	LT mg/m3	ST ppm	ST mg/m3
2. METHYLPROPAN 2 OL	WEL	100 ppm	306 mg/m3	150 ppm	462 mg/m3
MRTHANOL	WEL	200 ppm(Sk)	260/mg/m3 (SK)	250 ppm (Sk)	333 mg/M3 (SK)
Propylene Glycol	WEL	100 ppm	306 mg/m3	150 ppm	462 mg/m3

INGREDIENT COMMENTS

WEL - Worl place Exposure Limits

Protective Equipment





Gloves Suit

Process Condition	Use Engineering control to reduce Air contamination to permissible exposure level.
Engineering Measures	Explosion - proof general and local exahust ventialtion.
Respiratory Equipment	Use chemical cartridge protection with appropriate cartridge.Chemical respirator with organic vapour cartridge.

Hand Protection	Use protective gloves made of - Neoprane , Nitrile, polythene or pvc.
Eye Protection	Wear approved chemical safety gogle wher eye exposure is reasonably probable
Other Protection	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygiene Measures	Wash at end of the each work shift at before eating, smoking and using the toilet. Wash promptly with soap and water if skin become contaminated. Promptly remove any clothing that become contaminated.

9. Physical and chemical properties

Physical State	:	Liquid
Appearance	:	Clear Liquid
Odour		Odour of Alcohol.
Solubility	:	Soluble in Water
Melting Point	:	- 40
Relative Density	:	0.990 - 1.00 @ 16°C
Viscosity	:	10 cSt
Flash Point	:	Min 11 PM Closes cup

10. Stability and reactivity

Stability	No particular stability concern
Condition to Avoid	Avoid contact with strong oxidisers
Hazardous Polymerisation	Will not polymerise
Material to Avoid	Strong oxdising substances
Hazardous composition	Vapours/ gases /fumes of Carbon Dioxide (CO2) Carbon monoxide (CO).

11. Toxicological information

Inhalation	Toxic by inhalation. Toxic danger of very serious irreversible effects through inhatation. Vapor have a nrcoti effect and may cause head ache, fatigue, dizziness and nausea.
Skin Contact	Toxic if sallowed. Toxic danger of very serious irreversible effects if swallowed. May cause nausea, head ache,dizziness and intoxication.
Eye Contact	Toxic in contact with skin. Toxic danger of very serious irreversible effects in contact with skin. May be absorbed through the skin.

12. Ecological information

Bio Accumulation	Being water souable would not be expected to bioaccumulate.

Acute Fish Toxicity	Typical acuatic toxicity data for this type of product are 10-100 mg/l to marine fish.

13. Disposal considerations

Disposal Method	Absorb in vermiculite or dry sand dispose in licensed hazardous waste. Dispose of waste and residues in accordance with local authority requirements.
Wast Class	The definitive European waste code for this product will depend upon the final use that is made of this material. If the material as originally delivered is to be disposed of please contact Baker Petrolite HSE Q & RA dept for assistance assigning the correct EU waste code.

14. Transport information

UK ROAD CLASS	**3**
PROPER SHIPPING NAME	**FLAMMABLE LIQUID, TOXIC N O S (CONTAINS METHANOL)**
UN NO ROAD	**1993**
UK ROAD PACK GR	**8**
ADR CLASS NO	**3**
ADR CLASS	**Class 3 Flamable**
ADR PACK GROUP	8
ADR LEBEL NO	3 & 6.1
HAZ CHEM CODE	3 WE
RID CLASS NO	3
RID PACK GROUP	II
UN NO SEA	1992
IMDG CLASS	3
IMDG PACK GR	8
MARINE POLLUTANT	NO
UN NO AIR	1992
AIR CLASS	6.1
AIR PACK GR	8

15. Regulatory information

LABELLING

CONTAINS	METHNOL	
RISK PHRASES	R11	Highly flammable
	R 23/24/25	Toxic by inhalation in contact with skin and if sallowed.
	R 39/23/24/25	Toxic danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
	S 16	
	S38	In case of in sufficient ventilation, wear suitable ventilation.
	S 36/37/39	Wear suitable protrctive clothing, gloves and eye/face protection.

UK REGULATORY REFERENCES

CHEMICALS (Hazard information & Packaging) Regulations. The control of substances Hazardos to Health Regulatuons.

EU DIRECTIVES

Dangerous substance Directive 67/548/EEC .Dangerous Preparations. Directive 1999/45/EC.

16. Other information

RISK PHRASES IN FULL

R11	Highly flammable
R 20	Harmful by inhalation
R 23/24/26	Toxic by inhalation in contact with skin and if swallowed.
R 39/23/24/25	Toxic danger of very serious irreversible effects through inhalation in contact with skin and if swallowed.

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.