



SDS no.:

Version: 1

Version of: 02.09.08

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1. Product and Company Identification

Product Name	Rix Universal Antifreeze
Application	Automotive Industry.
Company	Rix Petroleum Limited Witham House 45 Spyvee Street Hull HU8 7JR
Emergency Telephone	Telephone No: (Hull) 01482 224422

2. Composition/Information on Ingredients

Name	EC No.	CAS-No.	Content	Classification
ETHANEDIOL	203-473-3	107-21-1	60-99%	Xn;R22

The Full Text for all R-Phrases are Displayed in Section 16

COMPOSITION COMMENTS Bitrex [Denatonium benzoate CAS 3734-33-6] may have been added in small quantities by customer request.

3. Hazards Identification

Harmful if swallowed.

CLASSIFICATION Xn;R22.

4. FIRST AID MEASURES

Inhalation:	Remove victim immediately from source of exposure. Place unconscious person on the side in the recovery position and ensure breathing Get medical attention.
Ingestion:	DO NOT INDUCE VOMITING! When risk of unconsciousness, place and transport the victim in secured side position. Drink plenty of water. Do not give victim anything to drink if they are unconscious. Get medical attention immediately!
Skin contact:	Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.
Eye contact:	Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5. FIRE FIGHTING MEASURES

Extinguishing media: Stop flow of material to fire.
Fire can be extinguished using:
Water fog or mist.
Alcohol resistant foam.
Carbon dioxide (CO₂).
Dry chemicals, sand, dolomite etc.

Special fire-fighting procedures: Avoid breathing fire vapours.
Use water to keep fire exposed containers cool and disperse vapours.
Keep run-off water out of sewers and water sources. Dike for water control.

6. ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Protect drains by covering to avoid any spillage entering the drainage system.

Spill cleanup methods: Stop leak if possible without risk.
Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.
Wear necessary protective equipment.
Absorb in vermiculite, dry sand or earth and place into containers.
Disposal should be carried out in accordance with the Hazardous Waste Regulations. If any liquid enters the drainage system or watercourse inform the local authorities, Fire Brigade and environment Agency

7. HANDLING AND STORAGE

Usage Precautions: Do not use in confined spaces without adequate ventilation and/or respirator.
Eliminate all sources of ignition.
Keep away from heat, sparks and open flame.
Avoid inhalation of vapours.
Avoid acids, moisture, and combustible materials.

Storage precautions: Store in tightly closed original container in a dry, cool and well-ventilated place.
Keep away from heat, sparks and open flame.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
ETHANEDIOL	WEL		52 mg/m3(Sk)		104 mg/m3(Sk)
GP3 ANTIFREEZE	WEL	60 mg/m3		125 mg/m3	

Protective Equipment:

Engineering Measures:

Must not be handled in confined space without sufficient ventilation.

Hand Protection:

Chemical resistant gloves required for prolonged or repeated contact.
Use protective gloves made of:
Impermeable material.

Eye Protection:

Wear approved safety goggles.

Hygiene Measures:

Wash at the end of each work shift and before eating, smoking and using the toilet.
Wash promptly with soap & water if skin becomes contaminated.
DO NOT SMOKE IN WORK AREA!

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid Hygroscopic Viscous		
Colour:	Blue		
Odour:	Odourless		
Solubility:	Miscible with water. Miscible with Acetone Alcohol		
Boiling Point (°C):	165 760 mm Hg	MELTING POINT (°C)	-12
Relative Density:	1.13 @ 20 °c	VAPOUR DENSITY (air=1)	2.14
Vapour Pressure :	0.05 kPa @ 20 °c	VISCOSITY	21 cps @ 20 °c
Flash point (°C):	111 CC (Closed cup).	AUTO IGNITION TEMPERATURE (°C)	400
Flammability Limit - Lower(%):	3.2		

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10. STABILITY AND REACTIVITY

Stability:	No particular stability concerns. Avoid: Heat, sparks, flames. Moisture.
Materials to avoid:	Acids, oxidising. Strong oxidising substances. Sulphuric Acid, Oleum, Phosphorous Pentasulphide, Chlorosulphonic acid

11. TOXICOLOGICAL INFORMATION

Toxic Dose 1 - LD 50:	5890-13400 mg/kg (oral rat)
Toxicological Information:	Toxicological information on major component only. As Ethanediol
General Information:	NOAEL Rabbit >3549 mg/kg
Ingestion:	Harmful if swallowed.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not regarded as dangerous for the environment. LC 50, 96 Hrs, FISH mg/l 22810 (rainbow trout) EC 50, 48 Hrs, DAPHNIA, mg/l 41000
Bioaccumulation:	The product is not bioaccumulating.
Degradability:	The product is expected to be biodegradable.

13. DISPOSAL CONSIDERATIONS

Disposal Methods:	This material must be disposed of via an Authorised Waste/Disposal Company in accordance with Local and or National Waste Disposal Regulations.
Waste Class:	Waste Code: 07 01 04 Waste code 13.02.05

14. TRANSPORT INFORMATION

Sea Transport Notes	Marpol 73/78 IBC Code Chapter 17: proper shipping name - ethylene glycol		
UN NO. ROAD	None	UK ROAD PACK GR	None
ADR CLASS	Not classified for transportation.	ADR PACK GROUP	None
Hazard No. (Adr)	Not relevant	CEFIC TEC(R) NO.	None
Imdg Class	None	EMS	None
Marine Pollutant	N/A.	AIR CLASS	None

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15. REGULATORY INFORMATION

Labelling:

Contains:

ETHANEDIOL

Risk phrases:

R22 Harmful if swallowed.

Safety phrases:

S2 Keep out of the reach of children
 S13 Keep away from food, drink and animal feeding stuffs.
 S46 If swallowed, seek medical advice immediately and show this container or label.
 S24/25 Avoid contact with skin and eyes.
 S56 Dispose of this material and its container to hazardous or special waste collection point.

UK Regulatory References:

The Control of Substances Hazardous to Health Regulations 1988.
 Health and Safety at Work Act 1974.
 The Chemical (Hazard Information and Packaging for Supply Regulations) 1993 amended & 2002.
 Health and Safety (First Aid) Regulations 1981.
 CDG Road, The Classification, Packaging and Labelling Regulations 1996.

Eu Directives

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

Statutory Instruments

Chemicals (Hazard Information and Packaging) Regulations.
 Control of Substances Hazardous to Health.

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40.

16. OTHER INFORMATION

Information Sources

Dangerous Properties of Industrial Chemicals, 7. ed., Sax & Lewis, 1988. Fire and Related Properties of Industrial Chemicals, Fire Protection Association.

Revision Comments

Added Sea Transport Notes in Section 14 Alterations to section(s) 1 2 12 11 16 Issued in new format for REACH compliance

Risk Phrases In Full

R22 Harmful if swallowed.

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.