



SAFETY DATA SHEET

Mono Ethylene Glycol

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

APPLICATION Automotive Industry.

SUPPLIER Petrochem Carless Limited
Head Office - Cedar Court
Guildford Road, Fetcham
Leatherhead, Surrey
KT22 9RX
+44(0)1372 360000
+44(0)1372 380400

CONTACT PERSON MSDSTeam@PetrochemCarless.com

EMERGENCY TELEPHONE Please contact Harwich Refinery on +44(0) 1255 502372

2 HAZARDS IDENTIFICATION

Harmful if swallowed.

CLASSIFICATION Xn;R22.

3 COMPOSITION/INFORMATION ON INGREDIENTS

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

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

EC (EINECS) NO. 203-473-3

CAS-NO. 107-21-1

4 FIRST-AID MEASURES

NOTES TO THE PHYSICIAN

Following over exposure by ingestion, treatment may be needed for CNS depression and severe acidosis. Early administration of ethanol may counter the effects of monoethylene glycol. Haemodialysis or peritoneal dialysis may be effective.

INHALATION

Fresh air and rest.

Get medical attention.

INGESTION

Rinse mouth thoroughly.

DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination.

Wash the skin immediately with soap and water.

Get medical attention if any discomfort continues.

EYE CONTACT

Rinse the eye with water immediately.

Continue to rinse for at least 15 minutes.

Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire can be extinguished using:

Mono Ethylene Glycol

Alcohol resistant foam.

Water spray, fog or mist.

Carbon dioxide (CO2).

Dry chemicals, sand, dolomite etc.

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Wear rubber or PVC gloves and goggles

ENVIRONMENTAL PRECAUTIONS

Inform regulatory authorities

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

SPILL CLEAN UP METHODS

Stop leak if possible without risk.

Inform Authorities if large amounts are involved.

Absorb with inert, damp, non-combustible material, then flush area with water.

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

Avoid inhalation of vapours.

USAGE DESCRIPTION

Avoid static build up by providing suitable earthing arrangements.

STORAGE PRECAUTIONS

Keep away from heat, sparks and open flame.

Store in tightly closed original container in a dry, cool and well-ventilated place.

STORAGE CLASS

Unspecified storage.

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)
Mono Ethylene Glycol	WEL	mg/m3	52 mg/m3	mg/m3	104 mg/m3

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Well-ventilated area.

HAND PROTECTION

Use protective gloves made of:

Rubber, neoprene or PVC.

EYE PROTECTION

If risk of splashing, wear safety goggles or face shield.

HYGIENE MEASURES

DO NOT SMOKE IN WORK AREA!

Promptly remove any clothing that becomes contaminated.

Wash at the end of each work shift and before eating, smoking and using the toilet.

Mono Ethylene Glycol

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Liquid		
COLOUR	Colourless		
ODOUR	Odourless		
SOLUBILITY	Miscible with water. Miscible with Acetone Alcohol		
BOILING POINT (°C)	196 - 199 760 mm Hg	MELTING POINT (°C)	-12
RELATIVE DENSITY	1.115 @ 20 °c	VAPOUR DENSITY (air=1)	2.14
VAPOUR PRESSURE	0.007 kPa @ 20 °c	pH-VALUE, DILUTED SOLUTION	6-7.5 @ 100g/l %
VISCOSITY	21 mPas @ 20 °c	FLASH POINT (°C)	111 CC (Closed cup).
AUTO IGNITION TEMPERATURE (°C)	410	FLAMMABILITY LIMIT - LOWER(%)	3.0
FLAMMABILITY LIMIT - UPPER(%)	15.3	SOLUBILITY VALUE (g/100g H2O@20°C)	100

10 STABILITY AND REACTIVITY

STABILITY

No particular stability concerns.

MATERIALS TO AVOID

Strong oxidising substances.

11 TOXICOLOGICAL INFORMATION

INHALATION

May cause irritation to the respiratory system.

INGESTION

Harmful or fatal if swallowed. May cause nausea, vomiting and diarrhoea.

SKIN CONTACT

Slightly irritating.

EYE CONTACT

Irritating to eyes.

12 ECOLOGICAL INFORMATION

ECOTOXICITY

Not regarded as dangerous for the environment.

LC 50, 96 Hrs, FISH mg/l 51000

MOBILITY

Liquid with low volatility.

BIOACCUMULATION

None

DEGRADABILITY

BOD28/COD = 56-64%; COD= 1.29 g O2/g

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.

This material must be disposed of via an Authorised Waste/Disposal Company in accordance with Local and or National Waste Disposal Regulations.

WASTE CLASS

This material and container must be disposed of as a HAZARDOUS WASTE.

14 TRANSPORT INFORMATION

GENERAL

Low hazard material not considered dangerous for carriage.

SEA TRANSPORT NOTES

Marpol 73/78 IBC Code Chapter 17: proper shipping name - ethylene glycol

Mono Ethylene Glycol

UN NO. ROAD	None	ADR CLASS NO.	None
RID CLASS NO.	None	UN NO. SEA	None
MARINE POLLUTANT	No.	UN NO. AIR	None

15 REGULATORY INFORMATION

LABELLING



Harmful

CONTAINS

ETHANEDIOL

RISK PHRASES

R22 Harmful if swallowed.

SAFETY PHRASES

S60 This material and its container must be disposed of as hazardous waste.

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.

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

CHIP for everyone HSG(108).

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

Issued in new format for REACH compliance

ISSUED BY

PCL Technical Team

REVISION DATE 24/01/2008**REV. NO./REPL. SDS** 3

GENERATED

SDS NO. 10675

SAFETY DATA SHEET STATUS

Approved.

DATE 14/09/06

RISK PHRASES IN FULL

R22 Harmful if swallowed.

DISCLAIMER

The information in this document has been compiled on the basis of the best available knowledge in accordance with the requirements of the Chemical Hazards, Information and Packaging regulations 1994 (as amended 1999). It does not imply that the information is complete or accurate in all cases. It is the user's responsibility to satisfy themselves as to the application of the information and/or the recommendations given for their own use.