



SAFETY DATA SHEET
Antifreeze

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Antifreeze
Product No. 7860
Internal Id 10437

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Antifreeze liquid. Corrosion inhibitor.

1.3. Details of the supplier of the safety data sheet

Supplier Morris Lubricants
Castle Foregate
Shrewsbury
SY1 2EL
Opening Hours 08.45 - 17.00 GMT
T: (+44)(0)1743 232200
F: (+44)(0)1743 353584
sds@morris-lubricants.co.uk

1.4. Emergency telephone number

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xn;R22.

2.2. Label elements

Contains ETHANEDIOL
Labelling



Harmful

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.
S56 Dispose of this material and its container to hazardous or special waste collection point.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Antifreeze

ETHANEDIOL		60-100%
CAS-No.: 107-21-1	EC No.: 203-473-3	
Classification (EC 1272/2008) Acute Tox. 4 - H302	Classification (67/548/EEC) Xn;R22	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues.

Inhalation

Remove victim immediately from source of exposure. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.

Ingestion

Do not induce vomiting. When risk of unconsciousness, place and transport the victim in secured side position. Immediately rinse mouth and drink plenty of water or milk. Keep person under observation. Do not induce vomiting. If vomiting occurs, keep head low. Transport immediately to hospital and bring along these instructions. Get medical attention immediately!

Skin contact

Remove contaminated clothing immediately and wash skin 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. Get medical attention promptly if symptoms occur after washing.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Heat from fire could result in drums bursting

Specific hazards

When heated and in case of fire, harmful vapours/gases may be formed.

5.3. Advice for firefighters

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.

Protective equipment for fire-fighters

Use air-supplied respirator, gloves and protective goggles.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Prevent entry into drains.

6.3. Methods and material for containment and cleaning up

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. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

6.4. Reference to other sections

Antifreeze

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry and cool place. Do not store near heat sources or expose to high temperatures.

Storage Class

Chemical storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANEDIOL	WEL		10 mg/m ³ (Sk)		104 mg/m ³ (Sk)	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

Protective equipment



Process conditions

Use engineering controls to reduce air contamination to permissible exposure level.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection

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

Other Protection

Use barrier creams to prevent skin contact.

Hygiene measures

Wash promptly with soap & water if skin becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid Hygroscopic Viscous
Colour	Blue.
Odour	Odourless.
Solubility	Miscible with water Miscible with: Acetone Alcohol
Initial boiling point and boiling range	165 760 mm Hg
Melting point (°C)	<-12
Relative density	1.13 20
Vapour density (air=1)	2.14
Vapour pressure	0.05 kPa 20
Viscosity	21 cps 20
Flash point	111 PM Closed cup.

Antifreeze

Auto Ignition Temperature (°C) 400
Flammability Limit - Lower(%) 3.2

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Water, moisture.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Flammable/combustible material.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50
>5000 mg/kg (oral rat)

Ingestion

Harmful if swallowed.

Skin contact

May be absorbed through the skin. Skin irritation is not anticipated when used normally.

Eye contact

May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Acute Fish Toxicity

Not considered toxic to fish.

LC 50, 96 Hrs, Fish mg/l 22810

EC 50, 48 Hrs, Daphnia, mg/l 41000

12.2. Persistence and degradability

Degradability

The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

The product is not bioaccumulating.

12.4. Mobility in soil

Mobility:

The product is water soluble and may spread in water systems.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Do not allow runoff to sewer, waterway or ground. Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General	The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).
Road Transport Notes	Not Classified
Rail Transport Notes	Not classified.
Air Transport Notes	Not classified.

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Uk Regulatory References

Health and Safety at Work Act 1974.

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

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

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision Date 13/12/2012

Revision 2

Supersedes date 18/06/2009

Risk Phrases In Full

R22 Harmful if swallowed.

Hazard Statements In Full

H302 Harmful if swallowed.

Antifreeze

Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.