



SAFETY DATA SHEET PREMIUM RED ANTIFREEZE

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

1.1. Product identifier

Product name PREMIUM RED ANTIFREEZE
Product No. FSA001, FSA002, FSA005, FSA025, FSA199

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

Identified uses Antifreeze liquid.

1.3. Details of the supplier of the safety data sheet

Supplier TETROSYL LIMITED
BEVIS GREEN WORKS
WALMERSLEY
BURY
BL9 6RE
0161 764 5981
0161 797 5899
info@tetrosyl.com
Manufacturer TETROSYL LIMITED
BEVIS GREEN WORKS
WALMERSLEY
BURY
BL9 6RE
0161 764 5981
0161 797 5899
info@tetrosyl.com

1.4. Emergency telephone number

0161 764 5981

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302
Environment	Not classified.

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

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

Human health

See section 11 for additional information on health hazards.

2.2. Label elements

Contains ETHANEDIOL

PREMIUM RED ANTIFREEZE

Label In Accordance With (EC) No. 1272/2008



Signal Word	Warning	
Hazard Statements		
	H302	Harmful if swallowed.
Precautionary Statements		
	P101	If medical advice is needed, have product container or label at hand.
	P102	Keep out of reach of children.
	P270	Do not eat, drink or smoke when using this product.
	P264	Wash contaminated skin thoroughly after handling.
	P501	Dispose of contents/container in accordance with local regulations.
Supplementary Precautionary Statements		
	P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P330	Rinse mouth.

2.3. Other hazards**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

ETHANEDIOL			60-100%
CAS-No.: 107-21-1	EC No.: 203-473-3	Registration Number: 01-2119456816-28	
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		Xn;R22	
POTASSIUM HYDROXIDE			<0.5
CAS-No.: 1310-58-3	EC No.: 215-181-3	Registration Number: 01-2119487136-33	
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Acute Tox. 4 - H302		C;R35	
Skin Corr. 1A - H314		Xn;R22	

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

Composition Comments

The data shown are in accordance with the latest EC Directives.

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

PREMIUM RED ANTIFREEZE

General information

NOTE! Effects may be delayed. Keep affected person under observation. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention. Remove victim immediately from source of exposure. Place unconscious person on the side in the recovery position and ensure breathing can take place. Do not give victim anything to drink if they are unconscious.

Inhalation

Remove victim immediately from source of exposure. Get medical attention if any discomfort continues. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration. In case of inhalation of spray mist: Move person into fresh air and keep at rest. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

Ingestion

Immediately rinse mouth and drink plenty of water. If person becomes uncomfortable or if ingested in large amounts (100-150 ml for an adult person): Take to hospital along with these instructions. Get medical attention immediately! Do not give victim anything to drink if he is unconscious. Try to induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

Skin contact

Remove contaminated clothes and rinse skin thoroughly with water. Get medical attention if any discomfort continues.

Eye contact

Do not rub eye. Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. NOTE! Effects may be delayed. Keep affected person under observation.

Inhalation

Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed. Ingestion may result in unconsciousness, blindness and death. Central nervous system depression.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

Irritation, burning, lachrymation, blurred vision after liquid splash.

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

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

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

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

PREMIUM RED ANTIFREEZE

Special Fire Fighting Procedures
 No specific fire fighting procedure given.
 Protective equipment for fire-fighters
 Leave danger zone immediately.

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

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities.

6.3. Methods and material for containment and cleaning up

For waste disposal, see section 13. When dealing with a spillage, please consult the section relating to suitable protective measures. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb spillage with non-combustible, absorbent material. Contact Health and Safety department on 6147 or 6695 for further assistance.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Wear full protective clothing for prolonged exposure and/or high concentrations. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid forming spray/aerosol mists. Observe occupational exposure limits and minimise the risk of inhalation of vapours and mist. Pregnant or breastfeeding women must not handle this product. Pregnant women should not work with the product, if there is the least risk of exposure.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Keep containers tightly closed. Keep upright. Keep in original container. Avoid contact with oxidising agents.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ETHANEDIOL	WEL	20 ppm	10 mg/m ³	40 ppm	104 mg/m ³	Sk
POTASSIUM HYDROXIDE	WEL				2 mg/m ³	

WEL = Workplace Exposure Limit.
 Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment

PREMIUM RED ANTIFREEZE

Process conditions

Provide eyewash station.

Engineering measures

Observe occupational exposure limits and minimize the risk of inhalation of vapours. Provide adequate ventilation.

Respiratory equipment

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

Hand protection

Nitrile gloves are recommended. Protective gloves must be used if there is a risk of direct contact or splash.

Eye protection

Wear approved, tight fitting safety glasses where splashing is probable.

Other Protection

Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash contaminated clothing before reuse. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that 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	Varying.
Odour	Odourless. or No characteristic odour.
Solubility	Miscible with water Miscible with: Acetone Alcohol
Initial boiling point and boiling range (°C)	197°C 760 mm Hg
Melting point (°C)	Not determined. -12°C
Relative density	1.10 20°C
Vapour density (air=1)	Not determined. 2.14
Vapour pressure	Not determined. 0.05 kPa 20°C
Evaporation rate	
Not determined.	
Viscosity	21 cP 20°C
Decomposition temperature (°C)	
Not determined.	
Odour Threshold, Lower	
Not determined.	
Odour Threshold, Upper	
Not determined.	
Flash point (°C)	111°C CC (Closed cup).
Auto Ignition Temperature (°C)	Not determined.
Flammability Limit - Lower(%)	400°C
	Not determined.
	3.2

PREMIUM RED ANTIFREEZE

Flammability Limit - Upper(%)

Not determined.

Partition Coefficient Not determined.

(N-Octanol/Water) -1.36

Oxidising properties

Not available.

9.2. Other information

None.

SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Reaction with: Oxidising materials.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not determined.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Toxic Dose 1 - LD 50

7712 mg/kg (oral rat)

Toxic Dose 2 - LD 50

5000 (Ethanediol) mg/kg (oral-rbt)

Toxicological information

No information available.

Target Organs

Central nervous system Heart & cardiovascular system Kidneys

Inhalation

Unlikely to be hazardous by inhalation because of the low vapour pressure of the substance at ambient temperature. Vapours may irritate throat and respiratory system and cause coughing.

Ingestion

Harmful if swallowed.

Skin contact

Slightly irritating.

PREMIUM RED ANTIFREEZE**Eye contact**

May cause temporary eye irritation.

Health Warnings

May cause liver and/or renal damage. Possible reproductive impact. CNS depressant. Nephrotoxin.

Route of entry

Ingestion.

Target Organs

Central nervous system Heart & cardiovascular system Kidneys

Medical Symptoms

Allergic rash. Delayed, often serious breathing problems. Tachycardia, (excessively rapid heart beat, including rapid and weak pulse). Unconsciousness, possibly death.

Specific effects

May cause damage to the kidneys. Contains a substance/a group of substances with possible risk of harm to the unborn child and with possible risk of impaired fertility.

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

LC 50, 96 Hrs, Fish mg/l 72860mg/l

Acute Toxicity - Fish

Not available.

EC 50, 48 Hrs, Daphnia, mg/l >100mg/l

Acute Toxicity - Aquatic Invertebrates

Not available.

IC 50, 72 Hrs, Algae, mg/l >6500mg/l

12.2. Persistence and degradability**Degradability**

The product is biodegradable.

12.3. Bioaccumulative potential**Bioaccumulative potential**

The product is not bioaccumulating.

Partition coefficient

Not determined. -1.36

12.4. Mobility in soil

Adsorption/Desorption Coefficient

Not available.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

PREMIUM RED ANTIFREEZE

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: TRANSPORT INFORMATION**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**

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Comments

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

Revision Date	08/11/2012
Revision	10
Supersedes date	08/09/2012 v9
Safety Data Sheet Status	Approved.
Risk Phrases In Full	

R35	Causes severe burns.
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R22	Harmful if swallowed.
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Hazard Statements In Full

H302	Harmful if swallowed.
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H314	Causes severe skin burns and eye damage.
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