



SAFETY DATA SHEET BLUECOL ANTIFREEZE

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

1.1. Product identifier

Product name BLUECOL ANTIFREEZE
Product No. BLA001, BLA005, BLA025, BLA199, BLA225

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

1.4. Emergency telephone number

0161 764 5981

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

BLUECOL ANTIFREEZE**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2. Mixtures**

DISODIUM TETRABORATE PENTAHYDRATE		1-5%
CAS-No.: 12179-04-3	EC No.: 215-540-4	
Classification (EC 1272/2008) Repr. 1A - H360FD	Classification (67/548/EEC) Repr. Cat. 1;R60,R61.	
ETHANEDIOL		60-100%
CAS-No.: 107-21-1	EC No.: 203-473-3	Registration Number: 01-2119456816-28
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. Remove affected person from source of contamination. NOTE! Effects may be delayed. Keep affected person under observation. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration.

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.

Ingestion

Get medical attention if any discomfort continues. 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!

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.

In high concentrations, vapours are anaesthetic and may cause headache, fatigue, dizziness and central nervous system effects. Irritation of nose, throat and airway.

Ingestion

May cause discomfort if swallowed. May cause stomach pain or vomiting. Ingestion of large amounts may cause unconsciousness. May cause nausea, headache, dizziness and intoxication. Burning sensation in mouth. Ingestion may result in unconsciousness, blindness and death.

BLUECOL ANTIFREEZE

Skin contact

Prolonged skin contact may cause redness and irritation. Mild dermatitis, allergic skin rash.

Eye contact

Irritation of eyes and mucous membranes. 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

May form explosive mixture with air at very high concentration.

Specific hazards

Vapours may form explosive air mixtures even at room temperature.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Leave danger zone immediately. Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet. Do not smoke, use open fire or other sources of ignition. Avoid inhalation of spray mist and contact with skin and eyes. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. 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

Stop leak if possible without risk. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Provide ventilation and confine spill. Do not allow runoff to sewer. Absorb spillage with suitable absorbent material.

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**

BLUECOL ANTIFREEZE

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.

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. Store away from: Acids. Oxidising material.

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		10 mg/m ³		104 mg/m ³	Sk

WEL = Workplace Exposure Limit.

Sk = Can be absorbed through skin.

8.2. Exposure controls

Protective equipment



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

For prolonged or repeated skin contact use suitable protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Nitrile gloves are recommended. PVC or rubber gloves are recommended.

Eye protection

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

Other Protection

Provide eyewash station.

Hygiene measures

Wash contaminated clothing before reuse. Wash 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	Clear liquid.
Colour	Blue.
Odour	Slight odour of alcohol.
Solubility	Miscible with water

BLUECOL ANTIFREEZE

Initial boiling point and boiling range 152°C
Melting point (°C) -12°C
Relative density 1.12 g/cm³ 20°C
Vapour density (air=1)
Scientifically unjustified.
Vapour pressure
Scientifically unjustified.
Evaporation rate
Scientifically unjustified.
pH-Value, Conc. Solution
Scientifically unjustified.
Viscosity 40 cps 25°C
Decomposition temperature (°C)
Scientifically unjustified.
Odour Threshold, Lower
Scientifically unjustified.
Odour Threshold, Upper
Scientifically unjustified.
Flash point (°C) 111°C
Auto Ignition Temperature (°C)
Scientifically unjustified.
Flammability Limit - Lower(%)
Scientifically unjustified.
Flammability Limit - Upper(%)
Scientifically unjustified.
Partition Coefficient
(N-Octanol/Water)
Scientifically unjustified.
Oxidising properties
Not available.

9.2. Other information**SECTION 10: STABILITY AND REACTIVITY****10.1. Reactivity**

Reaction with: Acids. Aldehydes. Isocyanates. Strong oxidising agents.

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 contact with strong oxidisers. Avoid heat, flames and other sources of ignition. Avoid contact with acids. Avoid contact with acids and oxidising substances. Will react violently with: Earth metals such as sodium, potassium and barium.

10.5. Incompatible materials

Materials To Avoid

Strong acids. Strong oxidising substances. Alkali metals. Metal oxides. Aldehydes. Isocyanates.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

BLUECOL ANTIFREEZE**11.1. Information on toxicological effects**

Toxic Dose 1 - LD 50 >6000 (ETHANEDIOL) mg/kg (oral rat)

Ingestion

Harmful if swallowed.

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact

May cause temporary eye irritation.

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

Acute Toxicity - Fish

Not available.

Acute Toxicity - Aquatic Invertebrates

Not available.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility:

The product is miscible with water. May spread in water systems.

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not available.

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.

13.1. Waste treatment methods

Confirm disposal procedures with environmental engineer and local regulations.

SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number**14.2. UN proper shipping name****14.3. Transport hazard class(es)**

Transport Labels

No transport warning sign required.

BLUECOL ANTIFREEZE**14.4. Packing group****14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutant
No.

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**SECTION 16: OTHER INFORMATION**

Revision Comments

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

Revision Date 24/08/2011

Revision 18

Supersedes date 01/10/2007 v17

Safety Data Sheet Status Approved.

Risk Phrases In Full

R22 Harmful if swallowed.

R61 May cause harm to the unborn child.

R60 May impair fertility.

Hazard Statements In Full

H302 Harmful if swallowed.

H360FD May damage fertility or the unborn child.