



SAFETY DATA SHEET BLUECOL UNIVERSAL ANTIFREEZE

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

1.1. Product identifier

Product name BLUECOL UNIVERSAL ANTIFREEZE
Product No. BLU001, BLU002, BLU100, MSB001

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

BLUECOL UNIVERSAL ANTIFREEZE**3.2. Mixtures**

ETHANEDIOL	30-60%
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

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

BLUECOL UNIVERSAL ANTIFREEZE**5.1. Extinguishing media**

Extinguishing media

Fire can be extinguished using: Alcohol resistant foam. Water spray, fog or mist. Carbon dioxide (CO₂). Dry chemicals.

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

Special Fire Fighting Procedures

No specific fire fighting procedure given.

Protective equipment for fire-fighters

Leave danger zone immediately. Use protective equipment appropriate for surrounding materials.

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. 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

The product should not be dumped in nature but collected and delivered according to agreement with the local authorities. Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground.

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**

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**

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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



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	Coloured liquid.
Colour	Light blue.
Odour	Slight odour of alcohol.
Solubility	Insoluble in water
Initial boiling point and boiling range	100-195 760 mm Hg
Melting point (°C)	Scientifically unjustified.
Relative density	1072 15
Vapour density (air=1)	Scientifically unjustified.
Vapour pressure	Scientifically unjustified. >1 mPa 20
Evaporation rate	Scientifically unjustified.
Decomposition temperature (°C)	Scientifically unjustified.
Odour Threshold, Lower	Scientifically unjustified.

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Odour Threshold, Upper
Scientifically unjustified.
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

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 contact with: Oxidising materials.

10.5. Incompatible materials

Materials To Avoid
Strong oxidising substances.

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
4700 mg/kg (oral rat)
Toxic Dose 2 - LD 50
5010 mg/kg (ipr-mouse)
Toxicological information
No information available.

Specific target organ toxicity - single exposure:

Target Organs
Central nervous system Heart & cardiovascular system Kidneys

Inhalation
May cause irritation to the respiratory system.

BLUECOL UNIVERSAL ANTIFREEZE**Ingestion**

Harmful if swallowed. May irritate and cause stomach pain, vomiting and diarrhoea. May cause nausea, headache, dizziness and intoxication.

Skin contact

Slightly irritating.

Eye contact

Irritating to eyes.

Health Warnings

This chemical can be hazardous when inhaled and/or touched. CNS depressant.

Route of entry

Ingestion.

Target Organs

Kidneys Liver

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**Acute Toxicity - Fish**

Not available.

EC 50, 48 Hrs, Daphnia, mg/l 46300

Acute Toxicity - Aquatic Invertebrates

Not available.

12.2. Persistence and degradability**Degradability**

The product is easily biodegradable.

12.3. Bioaccumulative potential**Bioaccumulative potential**

The product is not bioaccumulating.

Partition coefficient

Scientifically unjustified.

12.4. Mobility in soil**Adsorption/Desorption Coefficient**

Not available.

12.5. Results of PBT and vPvB assessment

BLUECOL UNIVERSAL ANTIFREEZE

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Not applicable.

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**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	16/08/2012
Revision	3
Supersedes date	19/09/2011 V2
Safety Data Sheet Status	Approved.
Risk Phrases In Full	
R22	Harmful if swallowed.
Hazard Statements In Full	
H302	Harmful if swallowed.