



SAFETY DATA SHEET AUTOCHEM BLUE ANTIFREEZE

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

1.1. Product identifier

Product name AUTOCHEM BLUE ANTIFREEZE
Product No. ABL001, ABL002, ABL005, ABL020, ABL199

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, R48/22.

2.2. Label elements

Contains MONO ETHYLENE GLYCOL

Labelling



Harmful

Risk Phrases

R22
R48/22

Harmful if swallowed.
Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Safety Phrases

S2
S13
S36
S46

S56

Keep out of the reach of children.
Keep away from food, drink and animal feeding stuffs.
Wear suitable protective clothing.
If swallowed, seek medical advice immediately and show this container or label.
Dispose of this material and its container to hazardous or special waste collection point.

AUTOCHEM BLUE ANTIFREEZE**2.3. Other hazards****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.	
MONO ETHYLENE GLYCOL		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 STOT RE 2 - H373	Classification (67/548/EEC) Xn;R22,R48/22.	

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.

AUTOCHEM BLUE ANTIFREEZE**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: Foam, carbon dioxide or dry powder. 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**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**

AUTOCHEM BLUE 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. 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
MONO ETHYLENE GLYCOL	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	Clear liquid.
Colour	Blue.
Odour	No characteristic odour.

AUTOCHEM BLUE ANTIFREEZE

Solubility Soluble in water.
Initial boiling point and boiling range 120°C
Melting point (°C) -25°C
Relative density 1.095g/cm³ 20°C
Vapour density (air=1)
Scientifically unjustified.
Vapour pressure
Scientifically unjustified.
Evaporation rate
Scientifically unjustified.
pH-Value, Diluted Solution 8
Decomposition temperature (°C)
Scientifically unjustified.
Odour Threshold, Lower
Scientifically unjustified.
Odour Threshold, Upper
Scientifically unjustified.
Flash point >100°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

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 materialsMaterials 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**

AUTOCHEM BLUE ANTIFREEZE

Toxic Dose 1 - LD 50
4700 (Ethanediol) mg/kg (oral rat)
Toxic Dose 2 - LD 50
5000 (Ethanediol) mg/kg (oral-rbt)
Toxicological information
No information available.

Specific target organ toxicity - single exposure:

Target Organs

Central nervous system Heart & cardiovascular system Kidneys

Aspiration hazard:

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

May cause liver and/or renal damage. Irritating. May cause nausea, stomach pain and vomiting. Harmful: possible risk of irreversible effects if swallowed.

Skin contact

Slightly irritating.

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

Acute Toxicity - Fish

Not available.

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.

AUTOCHEM BLUE ANTIFREEZE

Partition coefficient
Scientifically unjustified.

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

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

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport Labels
No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

Not applicable.

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

Not applicable.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

AUTOCHEM BLUE ANTIFREEZE

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 01/02/2012
Revision 3
Supersedes date 30/09/2011 v2
Safety Data Sheet Status Approved.

Risk Phrases In Full

R22 Harmful if swallowed.
R48/22 Harmful: danger of serious damage to health by prolonged exposure 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.
H373 May cause damage to organs <<Organs>> through prolonged or repeated exposure.