

**Sub Zero Blue Antifreeze**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) &amp; 2020/878

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product Name Sub Zero Blue Antifreeze  
Product code 222M, 2601, 222O, 222CM  
Unique Formula Identifier (UFI) X7E0-U000-G00S-8CCR

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

Identified Use(s) Antifreeze liquid. Antifreeze for vehicles.  
Uses Advised Against Not known.

**1.3 Details of the supplier of the safety data sheet****Manufacturer**

Company Identification Granville Oil & Chemicals Ltd  
Address of Manufacturer 29 Goldthorpe Ind. Est.,  
Goldthorpe,  
Rotherham,  
South Yorkshire,  
Postal code S63 9BL  
Telephone: +44 (0)1709 890099  
Fax Not known.  
E-mail lab@granvilleoil.com  
Office hours 08:00 - 17:00

**Supplier**

Company Identification Granville Oil & Chemicals Ltd  
Address of Supplier 29 Goldthorpe Ind. Est.,  
Goldthorpe,  
Rotherham,  
South Yorkshire,  
Postal code S63 9BL  
Telephone: +44 (0)1709 890099  
Fax Not known.  
E-mail lab@granvilleoil.com  
Office hours 08:00 - 17:00

**1.4 Emergency telephone number**

Emergency Phone No. +44 (0)1709 890099  
Contact Granville Lab

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Acute Tox. 4 :Harmful if swallowed.  
STOT RE 2 :May cause damage to organs through prolonged or repeated exposure.

**Sub Zero Blue Antifreeze****2.2 Label elements**

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

Sub Zero Blue Antifreeze

Contains

ethanediol ethylene glycol, sodium 2-ethylhexanoate

Hazard Pictogram(s)



GHS08



GHS07

Signal Word(s)

Warning

Hazard Statement(s)

H302: Harmful if swallowed.

H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P501: Dispose of contents in accordance with local, state or national legislation.

Unique Formula Identifier (UFI)

X7E0-U000-G00S-8CCR

**2.3 Other hazards**

None known.

**2.4 Additional Information**

For full text of H/P Statements see section 16.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
ethanediol ethylene glycol	107-21-1	203-473-3	45-100	Acute Tox. 4 H302 STOT RE 2 H373	GHS08 GHS07
sodium 2-ethylhexanoate	19766-89-3	243-283-8	<4	Repr. 2 H361d	GHS08

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HAZARDOUS INGREDIENT(S)	CAS No.	Specific Concentration Limit	M-factor	ATE
ethanediol ethylene glycol	107-21-1			Acute Tox. 4 (H302) : 500.000

Contains no non-classified vPvB substances or substances with a Union workplace exposure limit.

For full text of H/P Statements see section 16.

**3.2 Mixtures**

Not applicable.

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

Inhalation	Move affected person to fresh air at once. Get medical attention if any discomfort continues.
Skin Contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye Contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.

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

Inhalation:	Vapours in high concentrations are anaesthetic. Symptoms following overexposure may include the following: Headache. Fatigue. Dizziness. Central nervous system depression.
Ingestion	Ingestion of large amounts may cause unconsciousness. Causes damage to organs (Kidneys) through prolonged or repeated exposure if swallowed
Skin contact	Prolonged skin contact may cause redness and irritation.
Eye contact	May cause temporary eye irritation.

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

Notes for the doctor	If several ounces (60 - 100 ml) of ethylene glycol have been ingested, early administration of ethanol may counter the toxic effects (metabolic acidosis, renal damage). Consider hemodialysis or peritoneal dialysis & thiamine 100 mg plus pyridoxine 50 mg intravenously every 6 hours. If ethanol is used, a therapeutically effective blood concentration in the range of 100 - 150 mg/dl may be achieved by a rapid loading dose followed by a continuous intravenous infusion. Consult standard literature for details of treatment. 4-Methyl pyrazole (Antizol®) is an effective blocker of alcohol dehydrogenase and should be used in the treatment of ethylene glycol (EG), di- or triethylene glycol (DEG, TEG), ethylene glycol butyl ether (EGBE), or methanol intoxication if available. Fomepizole protocol: loading dose 15 mg/kg intravenously, follow by bolus dose of 10 mg/kg every 12 hours; after 48 hours,
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increase bolus dose to 15 mg/kg every 12 hours. Continue fomepizole until serum methanol, EG, DEG, TEG or EGBE are undetectable. The signs and symptoms of poisoning include anion gap metabolic acidosis, CNS depression, renal tubular injury, and possible late stage cranial nerve involvement. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. In severe poisoning, respiratory support with mechanical ventilation and positive end expiratory pressure may be required. Maintain adequate ventilation and oxygenation of the patient. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. If burn is present, treat as any thermal burn, after decontamination. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1 Extinguishing media

Suitable Extinguishing media                      Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.  
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

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Ketones. Aldehydes.

#### 5.3 Advice for firefighters

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Contain and collect extinguishing water. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.

#### 6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

#### 6.3 Methods and material for containment and cleaning up

Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

#### 6.4 Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet

### SECTION 7: HANDLING AND STORAGE

**Sub Zero Blue Antifreeze****7.1 Precautions for safe handling**

Avoid spilling. Avoid contact with skin and eyes. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation.

**7.2 Conditions for safe storage, including any incompatibilities**

Storage temperature Store in tightly-closed, original container in a dry, cool and well-ventilated place.  
Storage life Stable under normal conditions.  
Incompatible materials None known.

**7.3 Specific end use(s)**

Antifreeze liquid. Antifreeze for vehicles.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.1 Occupational Exposure Limits**

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Ethane-1,2-diol Particulate	107-21-1		10			Sk
Ethane-1,2-diol vapour	107-21-1	20	52	40	104	Sk

Region Source  
United Kingdom UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark Notes  
Sk Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

**8.2.2. Personal protection equipment****Eye Protection**

The following protection should be worn: Chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard (EN166).

**Skin protection**

Use protective gloves. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Butyl rubber. Polyvinyl chloride (PVC). To protect hands from chemicals, gloves should comply with European Standard (EN374).

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Respiratory protection If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. EN 136/140/141/145/143/149



Thermal hazards None known.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Physical state	Liquid.
Colour	Blue.
Odour	Mild.
Melting point/freezing point	Not known.
Boiling point or initial boiling point and boiling range	Not known.
Flammability	Not known.
Lower and upper explosion limit	Not known.
Flash Point	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not known.
pH	Not known.
Kinematic Viscosity	Not known.
Solubility	Solubility (Water) : Soluble in water. Solubility (Other) : Not known.
Partition coefficient n-octanol/water (log value)	Not known.
Vapour pressure	Not known.
Density and/or relative density	1.06 - 1.14.
Relative vapour density	Not known.
Particle characteristics	Not known.

**9.2 Other information**

None.

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

None anticipated.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Will not polymerise.

**10.4 Conditions to avoid**

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Avoid excessive heat for prolonged periods of time.

**10.5 Incompatible materials**

Strong oxidising agents. Strong acids. Strong alkalis.

**10.6 Hazardous decomposition products**

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Aldehydes. Ketones. Oxides of the following substances: Carbon.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity - Ingestion	Harmful if swallowed.
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Not classified.
Serious eye damage/irritation	Not classified.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified.

**11.2 Information on other hazards**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

**12.2 Persistence and degradability**

The product is expected to be biodegradable.

**12.3 Bioaccumulative potential**

The product is not bioaccumulating.

**12.4 Mobility in soil**

The product is soluble in water.

**12.5 Results of PBT and vPvB assessment**

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This product does not contain any substances classified as PBT or vPvB.

**12.6 Endocrine disrupting properties**

None known.

**12.7 Other adverse effects**

Not known.

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

**13.2 Additional Information**

Disposal should be in accordance with local, state or national legislation.

**SECTION 14: TRANSPORT INFORMATION**

Not classified as hazardous for transport.

**14.1 UN number or ID number**

Not applicable

**14.2 UN proper shipping name**

Not applicable

**14.3 Transport hazard class(es)**

Not applicable

**14.4 Packing group**

Not applicable

**14.5 Environmental hazards**

Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

Not known

**14.7 Maritime transport in bulk according to IMO instruments**

Not known

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances Not listed

subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and



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use of certain dangerous substances,  
mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EU) N° 2019/1021 of the Not listed

European Parliament and of the Council

on persistent organic pollutants

Regulation (EC) N° 1005/2009 on Not listed

substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the Not listed

European Parliament and of the Council

concerning the export and import of

hazardous chemicals

**National regulations**

Other Not known.

**15.2 Chemical Safety Assessment**

A REACH chemical safety assessment has not been carried out.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s)



GHS08



GHS07

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4

Repr. 2 : Reproductive toxicity, Category 2

STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2

Hazard Statement(s)

H302: Harmful if swallowed.

H361d: Suspected of damaging the unborn child.

H373: May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash hands and exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

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P330: Rinse mouth.

P501: Dispose of contents in accordance with local, state or national legislation.

## Acronyms

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for Regulation (EC) No. 1272/2008 (CLP) data used to compile the SDS

## Disclaimers

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