

**Zerocol 48 Green Antifreeze**

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

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

Product Name Zerocol 48 Green Antifreeze
Product code 2597, 2599, 2600, 2602
Unique Formula Identifier (UFI) TY57-A06T-R00S-9AYC

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

Identified Use(s) Coolant Antifreeze liquid.
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

Responsible Person

Company Identification Veedol Deutschland GmbH
Address of Responsible Person Hans-Böckler-Straße 10
Langenfeld,
Germany

Postal code 40764
Telephone: +49 (0) 2173 893 30 30
Fax Not known.
E-mail lab@granvilleoil.com
Office hours

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**

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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.

2.2 Label elements

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

Product Name Zerocol 48 Green 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+P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P501: Dispose of contents in accordance with local, state or national legislation.

Unique Formula Identifier (UFI) TY57-A06T-R00S-9AYC

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**

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)



Zerozol 48 Green Antifreeze

ethanediol ethylene glycol	107-21-1	203-473-3	60-100	Acute Tox. 4 H302 STOT RE 2 H373	GHS08 GHS07
sodium 2-ethylhexanoate	19766-89-3	243-283-8	1-5	Repr. 2 H361d	GHS08
disodium tetraborate pentahydrate borax pentahydrate	12179-04-3	215-540-4	<1	Eye Irrit. 2 H319 Repr. 1B H360FD	GHS08 GHS07
methyl-1H-benzotriazole	29385-43-1	249-596-6	<0.1	Acute Tox. 4 H302 Repr. 2 H361d Aquatic Chronic 2 H411	GHS08 GHS07 GHS09

HAZARDOUS INGREDIENT(S)	CAS No.	Specific Concentration Limit	M-factor	ATE
ethanediol ethylene glycol	107-21-1			Acute Tox. 4 (H302) : 500.000
methyl-1H-benzotriazole	29385-43-1			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.

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. DO NOT induce vomiting. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Ingestion of large amounts may cause unconsciousness. Lethal dose to humans 100ml Causes damage to organs through prolonged or repeated exposure if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed

**Zerozol 48 Green Antifreeze**

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, 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.

5.3 Advice for firefighters

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

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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. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4 Reference to other sections

See Also Section 8, 13.

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

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

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

Coolant Antifreeze liquid.

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 ³)	STEL (ppm)	STEL (mg/m ³)	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 Use with ventilation, local exhaust ventilation or breathing protection.

8.2.2. Personal protection equipment

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Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type A2. 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-green.
Odour	Not known.
Melting point/freezing point	Not known.
Boiling point or initial boiling point and boiling range	160°C
Flammability	Not known.
Lower and upper explosion limit	Not known.
Flash Point	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature	Not known.
pH	7.1 - 7.5
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	1.110 - 1.145 @ 20°C
Relative vapour density	Not known.
Particle characteristics	Not known.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

**Zerocol 48 Green Antifreeze****10.1 Reactivity**

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

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.

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

Acute toxicity - Ingestion	Calculation method : Harmful if swallowed. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 531.91000
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.
Skin sensitization data	Calculation method : Not classified.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.
Carcinogenicity	Calculation method : Not classified.
Reproductive toxicity	Self classification: Not classified.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Calculation method : 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.

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Toxicity - Sediment Compartment Not classified.

Toxicity - Terrestrial Compartment Not classified.

12.2 Persistence and degradability

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Endocrine disrupting properties

None known.

12.7 Other adverse effects

Not known.

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

Dispose of contents in accordance with local, state or national legislation. Dispose of this material and its container to hazardous or special waste collection point.

Dispose at suitable refuse site.

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

**Zerocol 48 Green Antifreeze****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

REACH: ANNEX XIV list of substances subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Community Rolling Action Plan (CoRAP)

Regulation (EU) N° 2019/1021 of the European Parliament and of the Council on persistent organic pollutants

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the 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

GHS09: GHS: Environment

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

Repr. 1B : Reproductive toxicity, Category 1B

Repr. 2 : Reproductive toxicity, Category 2

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STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2
Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2

Hazard Statement(s)

H302: Harmful if swallowed.
H319: Causes serious eye irritation.
H360FD: May damage fertility. May damage the unborn child.
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.

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+P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P314: Get medical advice/attention if you feel unwell.
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

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