



SAFETY DATA SHEET QUALUBE UNIVERSAL ANTIFREEZE

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name QUALUBE UNIVERSAL ANTIFREEZE
Product number ANTIFREEZE

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 WITHAM OIL AND PAINT LTD
 OUTER CIRCLE ROAD
 LINCOLN
 LN2 4HL
 01522 521192
 01522 537030
 01522 560228
 enquires@withamgroup.co.uk

1.4. Emergency telephone number

Emergency telephone (01502)563434 Monday to Thursday 8.00am to 5.00pm, Friday 8.00am to 4.30pm.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

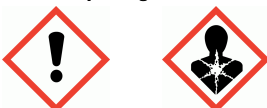
Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 Repr. 1B - H360F STOT RE 2 - H373
Environmental hazards Not Classified

Classification (67/548/EEC or -
 1999/45/EC)

2.2. Label elements

Hazard pictograms



Signal word Danger

Hazard statements H302 Harmful if swallowed.
 H360F May damage fertility.
 H373 May cause damage to organs through prolonged or repeated exposure.

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Precautionary statements	<p>P201 Obtain special instructions before use.</p> <p>P202 Do not handle until all safety precautions have been read and understood.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P270 Do not eat, drink or smoke when using this product.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.</p> <p>P308+P313 IF exposed or concerned: Get medical advice/ attention.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p> <p>P330 Rinse mouth.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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Contains ETHANEDIOL, DISODIUM TETRABORATE PENTAHYDRATE

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANEDIOL		60-100%
CAS number: 107-21-1	EC number: 203-473-3	
Classification Acute Tox. 4 - H302 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn;R22	
DISODIUM TETRABORATE PENTAHYDRATE		5-10%
CAS number: 12179-04-3	EC number: 215-540-4	
Classification Eye Irrit. 2 - H319 Repr. 1B - H360FD	Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 2;R60,R61	
SODIUM NITRITE		<1%
CAS number: 7632-00-0	EC number: 231-555-9	
M factor (Acute) = 1		
Classification Ox. Sol. 3 - H272 Acute Tox. 3 - H301 Aquatic Acute 1 - H400	Classification (67/548/EEC or 1999/45/EC) O;R8 T;R25 N;R50	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition comments Bitrex[Denatonium benzoate CAS 3734-33-6] may have been added in small quantities by customer request.

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Never give anything by mouth to an unconscious person. Place unconscious person on the side in the recovery position and ensure breathing can take place.
Inhalation	Move affected person to fresh air at once. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Give plenty of water to drink. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.

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

Inhalation	Upper respiratory irritation.
Ingestion	May cause stomach pain or vomiting. Nausea, vomiting.
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	Treat symptomatically.
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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

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of: Carbon.

5.3. Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapours. Containers close to fire should be removed or cooled with water. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment 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

Personal precautions	Wear protective clothing as described in Section 8 of this safety data sheet. No smoking, sparks, flames or other sources of ignition near spillage.
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6.2. Environmental precautions

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Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. Do not discharge into drains or watercourses or onto the ground. Collect and dispose of spillage as indicated in Section 13.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. DO NOT touch spilled material! No smoking, sparks, flames or other sources of ignition near spillage. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

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

Usage precautions Avoid inhalation of vapours/spray and contact with skin and eyes. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from food, drink and animal feeding stuffs. Keep only in the original container in a cool, well-ventilated place. Keep only in the original container in a cool, well-ventilated place. Keep containers upright. Store in closed original container at temperatures between 5°C and 25°C. Suitable container materials: Mild steel. Polyethylene. Stainless steel. Unsuitable container materials: Aluminium.

Storage class Chemical storage.

7.3. Specific end use(s)

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

Occupational exposure limits

Long-term exposure limit (8-hour TWA): WEL 60 mg/m³

Short-term exposure limit (15-minute): WEL 125 mg/m³

ETHANEDIOL

Long-term exposure limit (8-hour TWA): WEL 20 ppm 52 mg/m³ vapour

Short-term exposure limit (15-minute): WEL 40 ppm 104 mg/m³ vapour

Sk

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate

Sk

DISODIUM TETRABORATE PENTAHYDRATE

Long-term exposure limit (8-hour TWA): WEL 1.0 mg/m³

WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.

Ingredient comments WEL = Workplace Exposure Limits

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DNEL Industry - Inhalation; Long term local effects: 35 mg/m³
 Industry - Dermal; Long term systemic effects: 106 mg/kg
 Consumer - Inhalation; Long term local effects: 7 mg/m³
 Consumer - Dermal; Long term systemic effects: 53 mg/m³

PNEC - Fresh water; 10 mg/l
 - marine water; 1 mg/l
 - STP; 199.5 mg/l
 - Sediment (Freshwater); 20.9 mg/kg
 - Soil; 1.53 mg/kg
 - Intermittent release; 10 mg/l

ETHANEDIOL (CAS: 107-21-1)

DNEL Industry - Inhalation; Long term local effects: 35 mg/m³
 Industry - Dermal; Long term systemic effects: 106 mg/m³
 Consumer - Inhalation; Long term local effects: 7 mg/m³
 Consumer - Dermal; Long term systemic effects: 53 mg/m³

PNEC - Fresh water; 10 mg/l
 - marine water; 1 mg/l
 - STP; 199.5 mg/l
 - Sediment (Freshwater); 20.9 mg/kg
 - Soil; 1.53 mg/kg
 - Intermittent release; 10 mg/l

DISODIUM TETRABORATE PENTAHYDRATE (CAS: 12179-04-3)

DNEL Consumer - Oral; Short term systemic effects: 1.15 mg/kg/day
 Industry - Inhalation; Short term local effects: 17.04 mg/m³
 Industry - Inhalation; Long term local effects: 17.04 mg/m³
 Industry - Inhalation; Long term systemic effects: 9.8 mg/m³
 Consumer - Inhalation; Short term local effects: 17.04 mg/m³
 Consumer - Inhalation; Long term local effects: 17.04 mg/m³
 Consumer - Inhalation; Long term systemic effects: 4.9 mg/m³
 Industry - Dermal; Long term systemic effects: 458.2 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 231.8 mg/kg/day

PNEC - Fresh water; 2.02 mg/l
 - marine water; 2.02 mg/l
 - Intermittent release; 13.7 mg/l
 - Soil; 5.4 mg/kg
 - STP; 10.0 mg/l

SODIUM NITRITE (CAS: 7632-00-0)

DNEL Workers - Inhalation; Short term systemic effects: 2 mg/m³
 Workers - Inhalation; Long term systemic effects: 2 mg/m³

PNEC - Fresh water; 0.0054 mg/l
 - Sediment (Freshwater); 0.0195 mg/kg
 - Intermittent release; 0.0054 mg/l
 - Sediment (Marinewater); 0.0223 mg/kg
 - marine water; 0.00616 mg/l
 - STP; 21 mg/l
 - Soil; 0.000733 mg/kg

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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

Eye/face protection

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

Hand protection

It is recommended that gloves are made of the following material: Nitrile rubber. Polyvinyl alcohol (PVA). Butyl rubber. Neoprene. 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.

Other skin and body protection

Provide eyewash station and safety shower. Wear suitable protective clothing as protection against splashing or contamination.

Hygiene measures

Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P2.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Blue.
Odour	Odourless.
Melting point	-12°C
Initial boiling point and range	165°C @ 760 mm Hg
Flash point	111°C Closed cup.
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 3.2
Vapour pressure	0.05 kPa @ 20°C
Vapour density	2.14
Relative density	1.13 @ 20°C
Solubility(ies)	Miscible with the following materials: Acetone. Alcohols. Miscible with water.
Partition coefficient	log Pow: -1.93
Auto-ignition temperature	400°C
Viscosity	21 cP @ 20°C

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9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidising agents.

10.5. Incompatible materials

Materials to avoid Strong acids. Strong alkalis. Strong oxidising agents.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is applicable to the major ingredient.

Acute toxicity - oral

Species Rat

ATE oral (mg/kg) 512.82

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,500.0

Species Mouse

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 2.5

Species Rat

Skin corrosion/irritation

Animal data Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation Not irritating.

Skin sensitisation

Skin sensitisation Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Genome mutation: Negative. Not mutagenic

Carcinogenicity

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Carcinogenicity	Not available.
<u>Reproductive toxicity</u>	
Reproductive toxicity - fertility	Fertility - >1000 mg/kg, Oral, Rat Not expected to be a reproductive toxicant.
Reproductive toxicity - development	Not available.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Not available.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	NOAEL 200 mg/m ³ , Oral, Rat
General information	
	The product contains small amounts of organic solvents. Extensive use of the product in areas with inadequate ventilation may result in the accumulation of hazardous vapour concentrations.
Ingestion	Harmful if swallowed.
Skin contact	Prolonged contact may cause redness, irritation and dry skin.
Eye contact	Splashes in the eyes may cause irritation and reversible local damage
Acute and chronic health hazards	Prolonged contact may cause dryness of the skin.
Route of exposure	Inhalation Skin absorption Ingestion. Skin and/or eye contact

Toxicological information on ingredients.

ETHANEDIOL

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 7,712.0

Species Rat

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 3,500.0

Species Mouse

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ vapours mg/l) 2.5

Species Rat

Reproductive toxicity

Reproductive toxicity - fertility Fertility - Dose level: >1000 mg/kg, Oral, Rat P

Route of exposure Ingestion

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Target organs Kidneys

DISODIUM TETRABORATE PENTAHYDRATE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 3,200.0

Species Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,100.0

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 2.1

Species Rat

SODIUM NITRITE

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg) 180.0

Species Rat

SECTION 12: Ecological information

Ecotoxicity The product is not expected to be hazardous to the environment. Information given is applicable to the major ingredient.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: >100 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 96 hours: >6500 mg/l, Selenastrum capricornutum

Acute toxicity - microorganisms EC₂₀, 30 minutes: >1995 mg/l, Activated sludge

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 7 days: 15380 mg/l, Pimephales promelas (Fat-head Minnow)

Ecological information on ingredients.

ETHANEDIOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

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Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: >100 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC ₅₀ , 96 hours: 6500-13000 mg/l, Pseudokirchneriella subcapitata

DISODIUM TETRABORATE PENTAHYDRATE

Acute aquatic toxicity

Acute toxicity - fish	LC ₅₀ , 24 hours: 88 mg/l, Oncorhynchus mykiss (Rainbow trout) LC ₅₀ , 7 days: 65 mg/l, Carassius auratus (Goldfish)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 24 hours: 242 mg/l, Daphnia magna

SODIUM NITRITE

Acute aquatic toxicity

LE(C)₅₀	0.1 < L(E)C ₅₀ ≤ 1
M factor (Acute)	1
Acute toxicity - fish	LC ₅₀ , 48 hours: 360 mg/l, Leuciscus idus (Golden orfe) LC ₅₀ , 96 hours: 0.54-26.3 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC ₅₀ , 48 hours: 15.4 mg/l, Daphnia magna NOEC, : 9.86 mg/l,

12.2. Persistence and degradability

Persistence and degradability	The product is readily biodegradable.
Stability (hydrolysis)	Hydrolysis is not expected/ probable.

12.3. Bioaccumulative potential

Bioaccumulative potential	Bioaccumulation is unlikely.
Partition coefficient	log Pow: -1.93

12.4. Mobility in soil

Mobility	This material has volatility and is water soluble hence the potential for mobility is high.
Adsorption/desorption coefficient	Water - K _{oc} : 1 @ °C
Henry's law constant	0.1327 atm m ³ /mol @ °C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	This substance is not classified as PBT or vPvB according to current EU criteria.
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12.6. Other adverse effects

Other adverse effects	None known.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste is suitable for incineration.
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Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class Waste code: 07 01 04

SECTION 14: Transport information

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Ethylene glycol Pollution category: Cat Y Ship type: 3.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Health and Safety at Work etc. Act 1974 (as amended).

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation

Dangerous Substances Directive 67/548/EEC.

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) (as amended).

Dangerous Preparations Directive 1999/45/EC.

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by Technical manager

Revision date 15/10/2019

Revision 1

QUALUBE UNIVERSAL ANTIFREEZE

Supersedes date	02/09/2015
SDS number	20470
Hazard statements in full	H272 May intensify fire; oxidiser. H301 Toxic if swallowed. H302 Harmful if swallowed. H319 Causes serious eye irritation. H360F May damage fertility. H360FD May damage fertility. May damage the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.