



SAFETY DATA SHEET

EXLC 5 Antifreeze

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

1.1. Product identifier

Product name EXLC 5 Antifreeze

Product number 47182

Synonyms; trade names

REACH registration notes This material is a mixture. All components have been registered under REACH by the Manufacturer or Supplier.

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

Identified uses Automotive Industry.

1.3. Details of the supplier of the safety data sheet

Supplier Haltermann Carless UK Ltd
Head Office - Cedar Court, Guildford Road, Fetcham, Leatherhead, Surrey KT22 9RX United Kingdom
+44(0)1372 360000
+44(0)1372 380400

Contact person MSDSTeam@h-c-s-group.com

Manufacturer Haltermann Carless UK Ltd
Head Office - Cedar Court, Guildford Road, Fetcham, Leatherhead, Surrey KT22 9RX United Kingdom
+44(0)1372 360000
+44(0)1372 380400

1.4. Emergency telephone number

Emergency telephone Please contact SHE Department on +44(0) 1255 502372

National emergency telephone number NCEC (UK) National Chemical Emergency Centre +44 (0) 1235 239670

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards Not Classified

Health hazards Acute Tox. 4 - H302 Eye Irrit. 2 - H319 STOT RE 2 - H373

Environmental hazards Not Classified

Classification (67/548/EEC or 1999/45/EC) Xn;R22.

2.2. Label elements

EXLC 5 Antifreeze

Pictogram



Signal word

Warning

Hazard statements

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

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

Precautionary statements

P260 Do not breathe vapour/spray.

P264 Wash contaminated skin thoroughly after handling.

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P314 Get medical advice/attention if you feel unwell.

P330 Rinse mouth.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container in accordance with national regulations.

Contains

Mono Ethylene Glycol

2.3. Other hazards

This substance is not classified as PBT or vPvB according to current EU criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mono Ethylene Glycol			60-100%
CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 01-2119456816-28- xx	
Classification	Classification (67/548/EEC or 1999/45/EC)		
Acute Tox. 4 - H302	Xn;R22.		
STOT RE 2 - H373			
Potassium 2-ethyl hexanoate			1-2.99%
CAS number: 3164-85-0	EC number: 221-625-7	REACH registration number: *	
Classification	Classification (67/548/EEC or 1999/45/EC)		
Skin Irrit. 2 - H315	Repr. Cat. 3;R63. Xi;R38,R41.		
Eye Dam. 1 - H318			
Repr. 2 - H361d			

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

Composition comments

* This material is a reaction product between a mixture of organic acids and potassium hydroxide. As we do not isolate or place on the market the reaction product of this reaction, it is exempt from registration under Entry 4 of Annex V of the REACH regulations, as set out in "Guidance for Annex V, Exemptions From the Obligation to Register, Version 1.1, November 2012"

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SECTION 4: First aid measures

4.1. Description of first aid measures

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. Place unconscious person on the side in the recovery position and ensure breathing can take place. CAUTION! First aid personnel must be aware of own risk during rescue!
Inhalation	Remove affected person from source of contamination. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention.
Ingestion	Do not induce vomiting. Place unconscious person on their side in the recovery position and ensure breathing can take place. Give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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

Inhalation	No specific symptoms known.
Ingestion	Harmful if swallowed
Skin contact	No specific symptoms known.
Eye contact	No specific symptoms known.

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	Stop flow of material to fire. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Dry chemicals, sand, dolomite etc.
Unsuitable extinguishing media	None known

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. Use water to keep fire exposed containers cool and disperse vapours. 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

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Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of vapours. Provide adequate ventilation.

6.2. Environmental precautions

Environmental precautions Do not discharge into drains or watercourses or onto the ground. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. 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 For personal protection, see Section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Do not use in confined spaces without adequate ventilation and/or respirator. Eliminate all sources of ignition. Keep away from heat, sparks and open flame. Avoid contact with the following materials: Acids. Moisture. Avoid inhalation of vapours/spray and contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, sparks and open flame.

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

Mono Ethylene Glycol

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

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

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

Mono Ethylene Glycol (CAS: 107-21-1)

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

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PNEC	<ul style="list-style-type: none"> - 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
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Potassium 2-ethyl hexanoate (CAS: 3164-85-0)

DNEL	<p>Industry - Inhalation; Long term systemic effects: 32 mg/m³</p> <p>Industry - Dermal; Long term systemic effects: 12 mg/m³</p> <p>Consumer - Inhalation; Long term systemic effects: 8 mg/m³</p> <p>Consumer - Dermal; Long term systemic effects: 6 mg/m³</p> <p>Consumer - Oral; Long term systemic effects: 2.5 mg/kg/day</p>
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PNEC	<ul style="list-style-type: none"> - Fresh water; 0.36 mg/l - Marine water; 0.036 mg/l - Intermittent release; 0.493 mg/l - STP; 71.7 mg/l - Sediment (Freshwater); 6.37 mg/l - Sediment (Marinewater); 0.637 mg/l - Soil; 1.06 mg/kg
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Dipotassium adipate (CAS: 19147-16-1)

DNEL	<p>Industry - Inhalation; Long term systemic effects: 6.94 mg/m³</p> <p>Industry - Dermal; Long term systemic effects: 1.98 mg/kg/day</p> <p>Consumer - Inhalation; Long term systemic effects: 1.04 mg/m³</p> <p>Consumer - Dermal; Long term systemic effects: 0.69 mg/kg/day</p> <p>Consumer - Oral; Long term systemic effects: 0.69 mg/kg/day</p>
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PNEC	<ul style="list-style-type: none"> - Fresh water; 0.126 mg/l - Marine water; 0.0126 mg/l - Intermittent release; 0.46 mg/l - STP; 47.47 mg/l - Sediment (Freshwater); 0.484 mg/l - Sediment (Marinewater); 0.0484 mg/l - Soil; 0.0228 mg/kg
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Dipotassium succinate (CAS: 676-47-1)

DNEL	No DNEL available
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PNEC	No PNEC available
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8.2. Exposure controls

Protective equipment



Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation. Provide adequate general and local exhaust ventilation.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

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Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. Wear protective gloves made of the following material: Impermeable material. 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	Wear suitable protective clothing as protection against splashing or contamination. Provide eyewash station and safety shower.
Hygiene measures	Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap and water if skin becomes contaminated. Do not smoke in work area.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn.
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. Hygroscopic. Viscous liquid.
Colour	May be colourless or dyed in various colours depending on customer requirements
Odour	Odourless.
pH	pH (concentrated solution): 7.5 - 8.5
Melting point	-12°C
Initial boiling point and range	197°C @ 760 mm Hg
Flash point	111°C CC (Closed cup).
Vapour pressure	0.05 kPa @ °C
Relative density	1.10 @ @ 20°C
Solubility(ies)	Miscible with water. Miscible with the following materials: acetone Alcohols.
Partition coefficient	: -1.36
Auto-ignition temperature	400°C

9.2. Other information

Other information	Not known.
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SECTION 10: Stability and reactivity

10.1. Reactivity

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

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur
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10.4. Conditions to avoid

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Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Acids - oxidising. Strong oxidising agents. Sulphuric Acid, Oleum, Phosphorous Pentasulphide, Chlorosulphonic acid

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is applicable to the major ingredient.

Acute toxicity - oral

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

Species Rat

ATE oral (mg/kg) 543.48

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

Notes (inhalation LC₅₀) 6 hrs

Germ cell mutagenicity

Genotoxicity - in vitro : Negative.

Carcinogenicity

Carcinogenicity Not available.

Reproductive toxicity

Reproductive toxicity - fertility Fertility: - Dose level: >1000 mg/kg, Oral, Rat P Not expected to be a reproductive toxicant

Reproductive toxicity - development Not available.

Specific target organ toxicity - single exposure

STOT - single exposure Not available.

Specific target organ toxicity - repeated exposure

Target organs Kidneys

Route of entry Ingestion.

SECTION 12: Ecological Information

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Ecotoxicity Not regarded as dangerous for the environment. Information given is applicable to the major ingredient.

12.1. Toxicity

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

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

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

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

12.2. Persistence and degradability

Persistence and degradability Readily biodegradable

12.3. Bioaccumulative potential

Bioaccumulative potential Bioconcentration potential is low.

Partition coefficient : -1.36

12.4. Mobility in soil

Mobility This material has low volatility and is water soluble hence the potential for mobility is high.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects None known.

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.

Disposal methods This material must be disposed of via an Authorised Waste/Disposal Company in accordance with Local and or National Waste Disposal Regulations.

Waste class Waste Code: 07 01 04

SECTION 14: Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

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.

IMDG class

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ICAO class/division

Transport labels

14.4. Packing group

No information required.

ADR/RID packing group

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

No information required.

EmS

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).
Health and Safety at Work etc. Act 1974 (as amended).
Control of Substances Hazardous to Health Regulations 2002 (as amended).

EU legislation Dangerous Substances Directive 67/548/EEC.
Dangerous Preparations Directive 1999/45/EC.
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).
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

Guidance Workplace Exposure Limits EH40.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	Minor changes made Classification in line with CLP
Issued by	HCS Group Technical Team
Revision date	16/06/2015
Revision	11
Supersedes date	22/04/2015
SDS number	10836
SDS status	Approved.

EXLC 5 Antifreeze

Risk phrases in full

Not classified.
R22 Harmful if swallowed.
R36 Irritating to eyes.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R63 Possible risk of harm to the unborn child.

Hazard statements in full

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure if swallowed.
H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

The information in this document has been compiled on the basis of the best available knowledge in accordance with the legislative requirements. It does not imply that the information is complete or accurate in all cases. It is the user's responsibility to satisfy themselves as to the application of the information and/or the recommendations given for their own use.