SOLVENTIS
WORLD CLASS CHEMICAL SOLUTIONS

Part No: AFEXLT00FH-CED

SAFETY DATA SHEET
Coolant EXLC5

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

1.1. Product identifier

Product name	Coolant EXLC5
Product number	AFEXLT00FH
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	Solventis Ltd Bank Terrace, Gomshall Lane Shere Guildford. GU5 9HB United Kingdom
Contact person	KNash@solventis.net

1.4. Emergency telephone number

Emergency telephone	Please contact + 32 (0) 35755555

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 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

Pictogram



Signal word	Warning
Hazard statements	H302 Harmful if swallowed. H319 Causes serious eye irritation. H373 May cause damage to organs (Kidneys) through prolonged or repeated exposure if swallowed.

Precautionary statements	P260 Do not breathe vapour/ spray. 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. P501 Dispose of contents/ container in accordance with national regulations.
Contains	Mono Ethylene Glycol
Supplementary precautionary statements	P264 Wash contaminated skin thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330 Rinse mouth. P337+P313 If eye irritation persists: Get medical advice/ attention.

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 CAS number: 107-21-1	EC number: 203-473-3	REACH registration number: 012119456816-28- xx	>60-100%
Classification Acute Tox. 4 - H302 STOT RE 2 - H373	Classification (67/548/EEC or 1999/45/EC) Xn;R22.		
Potassium 2-ethyl hexanoate CAS number: 3164-85-0	EC number: 221-625-7	REACH registration number: *	>1-<3%
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Repr. 2 - H361d	Classification (67/548/EEC or 1999/45/EC) Repr. Cat. 3;R63. Xi;R38,R41.		

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” 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

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 their 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	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.
Skin contact	Remove contaminated clothing and rinse skin thoroughly with 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.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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.

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 products may include the following substances: Oxides of carbon.

5.3. Advice for firefighters

Protective actions during firefighting	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. Fight fire from safe distance or protected location.
Special protective equipment protective for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate 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. Avoid inhalation of vapours. Provide adequate ventilation. Take care as floors and other surfaces may become slippery. No action shall be taken without appropriate training or involving any personal risk.

6.2. Environmental precautions

Environmental precautions	Do not discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment. 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

Methods for cleaning up	Stop leak if safe to do so. 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.

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. Good personal hygiene procedures should be implemented. Provide adequate ventilation.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Take off contaminated clothing and wash it before reuse.

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 containers upright. Protect from light. Protect from sunlight. Store at temperatures between 0°C and 40°C. Keep away from food, drink and animal feeding stuffs.
Storage class	Unspecified 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

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

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
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

Potassium 2-ethyl hexanoate (CAS: 3164-85-0)

DNEL	Industry - Inhalation; Long term systemic effects: 32 mg/m³ Industry - Dermal; Long term systemic effects: 12 mg/m³ Consumer - Inhalation; Long term systemic effects: 8 mg/m³ Consumer - Dermal; Long term systemic effects: 6 mg/m³ Consumer - Oral; Long term systemic effects: 2.5 mg/kg/day

PNEC	- 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

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	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Butyl rubber. Neoprene. Nitrile rubber. Polyvinyl alcohol (PVA). It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. To protect hands from chemicals, gloves should comply with European Standard EN374.
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. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.
Respiratory protection	It is recommended to use respiratory equipment with combination filter, type A2/P2.

Environmental exposure Emissions from ventilation or work process equipment should be checked to ensure they controls 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.

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 oxides. Strong alkalis. Strong acids.

10.6. Hazardous decomposition products

Hazardous decomposition Heating may generate the following products: Oxides of carbon. products

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 (LD_{50} mg/kg)	7,712.0
Species	Rat
ATE oral (mg/kg)	543.48

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	3,500.0
Species	Mouse

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	2.5
Species	Rat
Notes (inhalation LC_{50})	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 Based on available data the classification criteria are not met.

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

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: 72860 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic EC_{50}, 48 hours: > 100 mg/l, Daphnia magna invertebrates

Acute toxicity - aquatic plants EC_{50}, 96 hours: > 6500 mg/l, Selenastrum capricornutum

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

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Bioaccumulation is unlikely.

Partition coefficient : -1.36

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems. The product is non-volatile.

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 suitable for incineration. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Waste class	Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

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.

Transport labels
No transport warning sign 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 required. No information

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).
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) (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	Change in company logo
Issued by	Solventis Technical Team

Coolant EXLC5

Revision date	N/A
Revision	1
SDS number	21397
SDS status	Approved.
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 (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 responsibilty to satisfy themselves as to the application of the information and/or the recommendations given for their own use.