

**Safety Data Sheet**

according to UK REACH Regulation

**Alphacool ES Liquid GL50 (-40°C) 1000ml**

Revision date: 02.02.2022

Product code: 1015596

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

**1.1. Product identifier**

Alphacool ES Liquid GL50 (-40°C) 1000ml

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

**Use of the substance/mixture**

Heat transferring agent

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

Company name:	Alphacool International GmbH	
	Tochtergesellschaft	
Street:	Marienberger Str. 1	
Place:	D-38122 Braunschweig	
Telephone:	0531 28874-0	Telefax: 0531 28874-22
e-mail:	info@alphacool.com	
Contact person:	Ronald Willms	Telephone: 05207 95846-205
e-mail:	einkauf@aquatuning.de	
Internet:	www.alphacool.com	

**1.4. Emergency telephone number:** +49 (0) 6131 19240

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**GB CLP Regulation**

Acute Tox. 4; H302

Full text of hazard statements: see SECTION 16.

**2.2. Label elements**

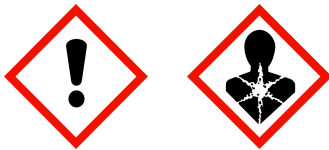
**GB CLP Regulation**

**Hazard components for labelling**

ethanediol; ethylene glycol  
2,2'-oxybisethanol; diethylene glycol

**Signal word:** Warning

**Pictograms:**



**Hazard statements**

H302 Harmful if swallowed.  
H373 May cause damage to organs (...) through prolonged or repeated exposure.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.  
P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P330 Rinse mouth.

**Labelling of packages where the contents do not exceed 125 ml**

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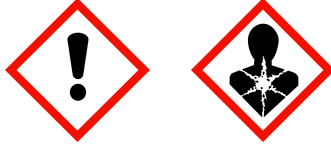
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Signal word:

Warning

Pictograms:



2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
107-21-1	ethanediol; ethylene glycol			55 - < 60 %
	203-473-3	603-027-00-1		
	Acute Tox. 4; H302			
111-46-6	2,2'-oxybisethanol; diethylene glycol			5 - < 10 %
	203-872-2	603-140-00-6		
	Acute Tox. 4; H302			
12179-04-3	disodium tetraborate pentahydrate; borax pentahydrate			1 - < 5 %
	215-540-4	005-011-02-9		
	Repr. 1B; H360FD			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
107-21-1	203-473-3	ethanediol; ethylene glycol	55 - < 60 %
	dermal: LD50 = 10600 mg/kg; oral: ATE = 500 mg/kg		
111-46-6	203-872-2	2,2'-oxybisethanol; diethylene glycol	5 - < 10 %
	dermal: LD50 = 11890 mg/kg; oral: ATE = 500 mg/kg		
12179-04-3	215-540-4	disodium tetraborate pentahydrate; borax pentahydrate	1 - < 5 %
	Repr. 1B; H360FD: >= 6,5 - 100		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

After inhalation

Provide fresh air. Call a doctor if you feel unwell.

After contact with skin

non-irritant.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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**After ingestion**

IF SWALLOWED: Immediately call a doctor.

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

No further relevant information available.

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

No further relevant information available.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. Foam, Extinguishing powder, Sand

**5.2. Special hazards arising from the substance or mixture**

In case of fire may be liberated: Gases/vapours, toxic

**5.3. Advice for firefighters**

Use suitable breathing apparatus.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Use suitable breathing apparatus. Provide adequate ventilation. Special danger of slipping by leaking/spilling product. Use of protective clothing

**6.2. Environmental precautions**

Dilute with plenty of water. Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up****For containment**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Provide adequate ventilation.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Provide adequate ventilation as well as local exhaust at critical locations. Avoid: generation/formation of aerosols

**Advice on protection against fire and explosion**

Use suitable breathing apparatus.

**Advice on general occupational hygiene**

Keep away from: Food and feedingstuffs Wash hands before breaks and after work. Separate storage of work clothes.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

No special measures are necessary.

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**Hints on joint storage**

No special measures are necessary.

**Further information on storage conditions**

none

**7.3. Specific end use(s)**

Heat transferring agent

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
111-46-6	2,2'-Oxydiethanol	23	101		TWA (8 h)	WEL
11130-12-4	Disodium tetraborate, pentahydrate	-	1		TWA (8 h)	WEL
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

**8.2. Exposure controls**



**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Wear eye/face protection.

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Skin protection**

Use of protective clothing.

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection.

**SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	blue
Odour:	characteristic
Odour threshold:	not determined

**Changes in the physical state**

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	106 °C
Sublimation point:	not determined

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Flash point: not applicable

**Flammability**

Solid/liquid: not applicable

Gas: not applicable

**Explosive properties**

The product is not: Explosive.

Lower explosion limits: not determined

Upper explosion limits: not determined

**Self-ignition temperature**

Solid: not applicable

Gas: not applicable

Decomposition temperature: not determined

pH-Value: not determined

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Water solubility: easily soluble

**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: not determined

Vapour pressure: not determined

Vapour pressure: not determined

Density (at 20 °C): 1,095 g/cm<sup>3</sup>

Relative vapour density: not determined

**9.2. Other information**

**Information with regard to physical hazard classes**

Oxidizing properties

The product is not: oxidising.

**Other safety characteristics**

Solid content: not determined

Evaporation rate: not determined

**Further Information**

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No further relevant information available.

**10.2. Chemical stability**

Thermal decomposition Thermal decomposition/ Conditions to avoid : No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

No further relevant information available.

**10.5. Incompatible materials**

No further relevant information available.

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10.6. Hazardous decomposition products

- Carbon monoxide
- aldehydes
- Gases/vapours, toxic
- Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 746,3 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	ATE 500 mg/kg			
	dermal	LD50 10600 mg/kg	Rabbit	GESTIS	
111-46-6	2,2'-oxybisethanol; diethylene glycol				
	oral	ATE 500 mg/kg			
	dermal	LD50 11890 mg/kg	Rabbit		

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Aquatic toxicity : No further relevant information available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
111-46-6	2,2'-oxybisethanol; diethylene glycol					
	Acute fish toxicity	LC50 > 32000 mg/l	96 h	Gambusia affinis		

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**12.2. Persistence and degradability**

No further relevant information available.

**12.3. Bioaccumulative potential**

No further relevant information available.

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36
111-46-6	2,2'-oxybisethanol; diethylene glycol	-1,98 (25°C)

**12.4. Mobility in soil**

No further relevant information available.

**12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.  
not applicable

**12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No further relevant information available.

**Further information**

Water hazard class 3: strongly hazardous to water.  
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Disposal recommendations**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.  
Dispose of waste according to applicable legislation.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.

**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.

**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.

**14.4. Packing group:** No dangerous good in sense of this transport regulation.

Danger releasing substance: not applicable

**14.6. Special precautions for user**

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

**SECTION 15: Regulatory information**

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

**EU regulatory information**

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Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):  
disodium tetraborate pentahydrate; borax pentahydrate

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 75

2004/42/EC (VOC): 67 % (733,65 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

**National regulatory information**

Water hazard class (D): 3 - highly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

**Abbreviations and acronyms**

- CLP: Classification, labelling and Packaging
  - REACH: Registration, Evaluation and Authorization of Chemicals
  - GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
  - UN: United Nations
  - CAS: Chemical Abstracts Service
  - DNEL: Derived No Effect Level
  - DMEL: Derived Minimal Effect Level
  - PNEC: Predicted No Effect Concentration
  - ATE: Acute toxicity estimate
  - LC50: Lethal concentration, 50%
  - LD50: Lethal dose, 50%
  - LL50: Lethal loading, 50%
  - EL50: Effect loading, 50%
  - EC50: Effective Concentration 50%
  - ErC50: Effective Concentration 50%, growth rate
  - NOEC: No Observed Effect Concentration
  - BCF: Bio-concentration factor
  - PBT: persistent, bioaccumulative, toxic
  - vPvB: very persistent, very bioaccumulative
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - RID: Regulations concerning the international carriage of dangerous goods by rail
  - MARPOL: International Convention for the Prevention of Marine Pollution from Ships
  - IBC: Intermediate Bulk Container
  - VOC: Volatile Organic Compounds
  - SVHC: Substance of Very High Concern
- For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method

**Relevant H and EUH statements (number and full text)**

- H302 Harmful if swallowed.
- H360FD May damage fertility. May damage the unborn child.
- H373 May cause damage to organs (...) through prolonged or repeated exposure.

**Further Information**

The information is based on the present level of our knowledge. It does not, however, give assurance of



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product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*