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

1.1. Product identifier

Product form : Mixture
Name : SOLUFLUID ENERGY
Product code : 103756000

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Heat transfer fluid

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
Dehon Service SAS
26 Avenue du Petit Parc
94683 VINCENNES Cedex
France
T 01 43 98 75 00 - F 01 43 98 21 51
ContactFDS@climalife.dehon.com

Other
Climalife Hongrie Kft
Villányi út 47
1118 Budaörs
Hungary
T (36) 23 431 660 - F (36) 23 431 661
ContactFDS@climalife.dehon.com

Other
Climalife Kft Budepesta sucurcala Bucuresti Romania
Bulevardul Hristo Botev, Nr. 28, Biroul NR 4, Modulul I
Bucuresti Sectorul 3
Romania
ContactFDS@climalife.dehon.com

Other
Climalife Supplied by Inventec Performance Chemicals Italia SRL
Via del Lavoro, 10/G
20874 Busnago MB
Italia
T +39 39-5973480 - F +39 39-5973490
ContactFDS@climalife.dehon.com

Other
Dehon nordic service
Östra Hamngatan 50B 3tr
41109 GÖTEBORG
Sweden
T 00 46 735 01 90 50
ContactFDS@climalife.dehon.com

Other
Dehon Service Belgium s.a/n.v.
Avenue Carton de Wiart, 79
1090 Bruxelles
Belgium
T 00 32 2 421 01 70 - F 00 32 2 426 96 62
ContactFDS@climalife.dehon.com

Other
Dehon Service Nerderland B.V.
Van Konijnenburgweg 84
NL-4612 PL Bergen Op Zoom
Netherlands
T 00 31 164 212 830 - F 00 31 164 212 831
ContactFDS@climalife.dehon.com

Other
Dehon Kälte-Fachvertriebs GmbH
Robert-Bosch-Strasse 14
40668 MEERBUSCH
Germany
T 00 49 2150 7073 0 - F 00 49 2150 7073 17
ContactFDS@climalife.dehon.com

Other
Friogas sa
Poligono Industrial SEPES Parcela 10
46500 SAGUNTO (Valencia)
Spain
T 00 34 9 6 266 36 32 - F 00 34 9 6 266 50 25
ContactFDS@climalife.dehon.com

Other
IDS Refrigeration Limited
22 Apex Court, Woodlands, Bradley Stoke
BS32 4JT Bristol
United Kingdom
T 00 44 1179 802520 - F 00 44 1179 802521
ContactFDS@climalife.dehon.com

1.4. Emergency telephone number

Emergency number : +33 (0) 1 72 11 00 03

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

EUH-statements : EUH210 - Safety data sheet available on request.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
Propane-1,2-diol (57-55-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Propane-1,2-diol(57-55-6)	

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propane-1,2-diol	CAS-No.: 57-55-6 EC-No.: 200-338-0 REACH-no: 01-2119456809-23	<50	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move the affected person away from the contaminated area and into the fresh air. If experiencing respiratory symptoms: Call a poison center or a doctor.

First-aid measures after skin contact : Not specifically applicable. When symptoms occur: rinse immediately with plenty of water. Always wash hands after handling the product.

First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Not expected to present a significant hazard under anticipated conditions of normal use.

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Non flammable.

Hazardous decomposition products in case of fire : On heating or during combustion : Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Precautionary measures fire : Fight fire from safe distance and protected location. Cool down the containers exposed to heat with a water spray.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Wear personal protective equipment.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent liquid from entering sewers, watercourses, underground or low areas. Do not allow product to spread into the environment.

6.3. Methods and material for containment and cleaning up

For containment : Take up liquid spill into inert absorbent material. Place in an appropriate container and dispose of the contaminated material at a licensed site.

6.4. Reference to other sections

For disposal of solid materials or residues refer to section 13 : "Disposal considerations". For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures : Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : General ventilation.
Incompatible products : Oxidizing agent. Reducing agent. Strong acids. Water.
Maximum storage period : 5 year
Storage area : Keep out of frost. Store at ambient temperature. Prolonged storage at low temperatures causes a change in allotrope which affects the physical properties of the substance. Store away from heat.
Packaging materials : Unsuitable materials: Zinc.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Propane-1,2-diol (57-55-6)	
United Kingdom - Occupational Exposure Limits	
Local name	Propane-1,2-diol
WEL TWA (OEL TWA) [1]	10 mg/m³ particulates 474 mg/m³ total vapour and particulates
WEL TWA (OEL TWA) [2]	150 ppm total vapour and particulates
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Propane-1,2-diol (57-55-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	200 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	168 mg/m³
Long-term - local effects, inhalation	10 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects,oral	85 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	50 mg/m³
Long-term - systemic effects, dermal	213 mg/kg bw/day
PNEC (Water)	
PNEC aqua (freshwater)	260 mg/l
PNEC aqua (marine water)	26 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	572 mg/kg dwt
PNEC sediment (marine water)	57.2 mg/kg dwt

Propane-1,2-diol (57-55-6)	
PNEC (Soil)	
PNEC soil	50 mg/kg dwt
PNEC (Oral)	
PNEC oral (secondary poisoning)	1133 mg/kg
PNEC (STP)	
PNEC sewage treatment plant	20000 mg/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No additional information available

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:
Safety glasses with side shields

8.2.2.2. Skin protection

Skin and body protection:
Use chemically protective clothing.

Hand protection:
Chemically resistant protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:
No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Yellow.
Odour	:	weak.
Odour threshold	:	Not available
Melting point	:	-20 – -25 °C
Freezing point	:	Not available
Boiling point	:	105 – 106 °C
Flammability	:	Not available
Explosive properties	:	Not explosive material according to EC criteria.
Oxidising properties	:	Non oxidizing material according to EC criteria.
Lower explosion limit	:	Not available
Upper explosion limit	:	Not available
Flash point	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	8.3

Viscosity, kinematic	:	Not available
Solubility	:	In water, material soluble.
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	1.035 g/cm³ (20°C)
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions of use.

10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid high temperatures.

10.5. Incompatible materials

Strong acids. Strong oxidizers. Strong reducing agents.

10.6. Hazardous decomposition products

On thermal decomposition (pyrolysis), releases : Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

Propane-1,2-diol (57-55-6)	
LD50 oral rat	≥ 2000 – ≤ 5000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	317 mg/l/4h

Skin corrosion/irritation	:	Not classified pH: 8.3
Additional information	:	May cause slight irritation to the skin
Serious eye damage/irritation	:	Not classified pH: 8.3

Additional information : May cause slight irritation to eyes
Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

Propane-1,2-diol (57-55-6)	
Viscosity, kinematic	42.1 mm²/s (25°C)

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

Propane-1,2-diol (57-55-6)	
LC50 - Fish [1]	≥ 51400 mg/l Pimephales promelas
EC50 - Other aquatic organisms [1]	43500 mg/l Daphnia magna (Water flea)
EC50 - Other aquatic organisms [2]	18800 mg/l Mysidopsis bahia
EC50 72h - Algae [1]	24200 mg/l Pseudokirchneriella subcapitata
NOEC chronic crustacea	13020 mg/l Ceriodaphnia sp.

12.2. Persistence and degradability

Propane-1,2-diol (57-55-6)	
Persistence and degradability	Readily biodegradable.
Biochemical oxygen demand (BOD)	1.45 g O2/l
Chemical oxygen demand (COD)	1.585 g O_2/g substance
Biodegradation	81 % 28 days

12.3. Bioaccumulative potential

Propane-1,2-diol (57-55-6)	
Bioconcentration factor (BCF REACH)	0.09
Partition coefficient n-octanol/water (Log Pow)	-1.07 at 20 °C

12.4. Mobility in soil

Propane-1,2-diol (57-55-6)	
Surface tension	≈ 71.6 mN/m (21.5°C)

12.5. Results of PBT and vPvB assessment

Component	
Propane-1,2-diol (57-55-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.
Additional information : The user's attention is drawn to the possible existence of specific european, national or local regulations regarding disposal.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number or ID number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:	
EUH210	Safety data sheet available on request.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.