

DC COOLING BIOLIFE 4

SDS # : C3DPQMBPG

previous revision date : 2023/04/26

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

1.1 Product identifier

Product name : DC COOLING BIOLIFE 4

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

Identified uses
Manufacture of substance - Industrial Distribution of substance - Industrial Formulation and (re)packing of substances and mixtures - Industrial Use in functional fluids - Consumer Use in functional fluids - Industrial Use in functional fluids - Professional Use in laboratories - Industrial Use in laboratories - Professional

1.3 Details of the supplier of the safety data sheet

TotalEnergies Fluids
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92078 Paris La Défense Cedex
FRANCE
Tel: +33 (0)1 41 35 40 00
Fax: +33 (0)1 41 35 82 88
[REDACTED]@totalenergies.com

TotalEnergies Marketing Belgium
Anspachlaan 1, bus 2 / Boulevard anspach 1, boîte 2
1000 Brussel/Bruxelles – België/Belgique
Tél: [REDACTED] 933
Fax: [REDACTED] 260
[REDACTED]@totalenergies.com

Contact

H.S.E

1.4 Emergency telephone number

Supplier

Telephone number : National advisory body/Poison Center : [REDACTED]
Supplier (info product): +44 1235239670
SOS TotalEnergies Marketing Belgium (transport): +32 78 15 51 51

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Asp. Tox. 1, H304

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H304 - May be fatal if swallowed and enters airways.

Precautionary statements

Prevention : Not applicable.

Response : P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P331 - Do NOT induce vomiting.

Storage : Not applicable.

Disposal : Not applicable.

Contains : Renewable hydrocarbons, C17-C18, branched alkanes

Supplemental label elements : Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration $\geq 0,1$ %.

Other hazards which do not result in classification : Vapor may be irritating to eyes and respiratory system.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/substance	Identifiers	% (w/w)	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Renewable hydrocarbons, C17-C18, branched alkanes	REACH #: 01-2120107957-49 EC: 942-446-7 CAS: 90622-53-0*	≥ 90	Asp. Tox. 1, H304	-	[1]

			See Section 16 for the full text of the H statements declared above.		
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Additional information : content of aromatic compounds: <0.005%

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

☒ Substance classified with a health or environmental hazard

The EC substance definition and related classification & labelling have been developed in the framework of the Regulation (EC) No 1907/2006 (REACH). The related CAS number* is used for the purpose of the international inventories present in section 15 of the SDS.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : ☒ Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Use adequate personal protective equipment as needed

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : ☒ Adverse symptoms may include the following:
irritation
dryness
cracking
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious pulmonary lesions (medical survey during 48 hours)
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam. Sand.
- Unsuitable extinguishing media** : Do not use a solid water stream as it may scatter and spread fire

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous combustion products** : Decomposition products may include the following materials:
Carbon dioxide (CO₂).
carbon monoxide
various hydrocarbons
Aldehyde.
Soot

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
- Additional information** : Not considered explosive based on chemical structure and oxygen balance considerations

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.
- 6.4 Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

- Recommendations** : See exposure scenarios
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Reportable hazardous constituent(s) contained in UVCB and/or multi-constituent substance(s) complying with the classification criteria and/or with an exposure limit (OEL)

No exposure limit value known.

Biological Limit Values (BLV)

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following:
European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Advisory OEL : Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)

DNELs/DMELs

☒ No DNELs/DMELs available.

PNECs

☒ No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : In splash contact: safety glasses with side-shields or face shield

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Repeated or prolonged exposure

Glove material: Nitrile rubber; Glove thickness > 0.55 mm; Break through time > 480 min; standard : EN 374

Glove material: Fluorinated rubber; any thickness; Break through time > 480 min; standard : EN 374

Glove material: polyvinyl alcohol (PVA); any thickness; Break through time > 480 min; standard : EN 374

In case of contact through splashing

Glove material: Nitrile rubber; Glove thickness > 0.38 mm; Break through time > 60 min; standard : EN 374

Glove material: Neoprene; Glove thickness > 0.75 mm; Break through time > 60 min; standard : EN 374

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wear gloves according to EN374 resistant to the solvent(s) in use.

Body protection : ☒ Wear suitable protective clothing.
Protective shoes or boots.

- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
Wear a respirator conforming to EN140 with type A filter or better.
- 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

The conditions of measurement of all properties are at standard temperature (20°C / 68°F) and pressure (1013 hPa) unless otherwise indicated

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Colorless.
- Odor** : Odorless.
- pH** : Not applicable. Product is non-soluble (in water).
- Melting point/freezing point** : 30°C
- Initial boiling point and boiling range** : 285 to 335°C [ISO 3405]
- Flash point** : Closed cup: >135°C [ISO 2719]
- Flammability** : Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
- Lower and upper explosion limit** : Not available.
- Vapor pressure** : 0.0008 kPa [EN 13016-1]
- Vapor density** : Not available.
- Relative density** : 0.785 [ISO 12185]
- Density** : 0.785 g/cm³ [15°C] [ISO 12185]
- Solubility(ies)** :

Media	Result
water	Not soluble

- Miscible with water** : No.
- Partition coefficient: n-octanol/ water** : Not applicable.
- Auto-ignition temperature** : >300°C [ISO 20823]
- Decomposition temperature** : Not available.
- Viscosity** : Kinematic (room temperature): 3 to 4.5 mm²/s
Kinematic (40°C): <20.5 mm²/s [ISO 3104]

Particle characteristics

- Median particle size** : Not applicable.

9.2 Other information

- Evaporation rate** : >15 (butyl acetate = 1) [DIN 53170]
- Pour point** : -35°C (-31°F)
- Explosive properties** : Not considered explosive based on chemical structure and oxygen balance considerations

Oxidizing properties : This product is not considered oxidising based on chemical structure considerations

SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : heat, open flames, sparks and static discharge

10.5 Incompatible materials : Reactive or incompatible with the following materials:
strong acids
Strong oxidizing agents

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity

Product/substance	Result	Species	Dose	Exposure	Test
Renewable hydrocarbons, C17-C18, branched alkanes	LD50 Dermal	Rat	>2000 mg/kg	-	EU EC B3
	LD50 Oral	Rat	>5000 mg/kg	-	EU EC B1 tris

Acute toxicity estimates

N/A

Conclusion/Summary : Based on available data, the classification criteria are not met.

Irritation/Corrosion

Conclusion/Summary

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

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

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

Sensitization

Conclusion/Summary

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

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

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Conclusion/Summary : Based on available data, the classification criteria are not met.

Aspiration hazard

Product/substance	Result
Renewable hydrocarbons, C17-C18, branched alkanes	ASPIRATION HAZARD - Category 1

Conclusion/Summary : Based on available data, the classification criteria are met.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : Defatting to the skin. May cause skin dryness and irritation.
Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No specific data.
Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
irritation
dryness
cracking
Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.
General : No known significant effects or critical hazards.
Carcinogenicity : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/substance	Result	Species	Exposure	Test
Renewable hydrocarbons, C17-C18, branched alkanes	Acute EC50 3201 mg/l	Algae - <i>Skeletonema costatum</i>	72 hours	ISO 10253
	Acute LL50 64742 mg/l	Daphnia - <i>Acartia tonsa</i>	48 hours	ISO TC147/SC5/WG2
	Acute LL50 1028 mg/l	Fish	96 hours	-
	Acute NOELR 993 mg/l	Algae - <i>Skeletonema costatum</i>	72 hours	ISO 10253
	Chronic NOELR 1001 mg/l	Daphnia - <i>Daphnia magna</i>	21 days	-
	Chronic NOELR >1000 mg/l	Fish - <i>Oncorhynchus mykiss</i>	28 days	-

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/substance	Test	Result	Dose	Inoculum
Renewable hydrocarbons, C17-C18, branched alkanes	OECD 306	83 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/substance	Aquatic half-life	Photolysis	Biodegradability
Renewable hydrocarbons, C17-C18, branched alkanes	-	-	Readily

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

Mobility in soil : Given its physical and chemical characteristics, the product generally shows low soil mobility The product is insoluble and floats on water

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB in a concentration >= 0,1 %.

12.6 Endocrine disrupting properties

This product does not contain any substance present at a concentration equal to or greater than 0.1% by mass, included in the list drawn up in accordance with article 59, paragraph 1 of the REACH Regulation, due to its endocrine disrupting properties, or a substance known to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation 2018/605.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific

Packaging

- Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ICAO/IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

- 14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Maritime transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Explosive precursors : ☒ Not applicable.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

LU - Luxembourg prohibited chemicals in the workplace

Not listed.

Inventory list

Australia inventory (AIIIC)	: All components are listed or exempted.
Canada inventory (DSL/NDL)	: All components are listed or exempted.
China inventory (IECSC)	: All components are listed or exempted.
Europe inventory (EC)	: All components are listed or exempted.
Japan inventory	: Japan inventory (CSCL) : All components are listed or exempted. Japan inventory (ISHL) : Not determined.
New Zealand Inventory of Chemicals (NZIoC)	: All components are listed or exempted.
Philippines inventory (PICCS)	: All components are listed or exempted.
Korea inventory (KECI)	: All components are listed or exempted.
Taiwan Chemical Substances Inventory (TCSI)	: All components are listed or exempted.
Thailand inventory	: Not determined.
Turkey inventory	: Not determined.
United States inventory (TSCA 8b)	: All components are listed or exempted.
Vietnam inventory	: Not determined.

The information stated in this section relates solely to the conformity of the chemical product with the countries Inventories. The information used to confirm the inventory status of this product may be based on additional data to the chemical composition shown in Section 3. Other regulations may apply for importation or marketing authorizations.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
DMEL = Derived Minimal Effect Level
EUH statement = CLP-specific Hazard statement
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
vPvB = Very Persistent and Very Bioaccumulative
PNEC = Predicted No Effect Concentration
LC50 = Median lethal concentration
LD50 = Median lethal dose
OEL = Occupational Exposure Limit
VOC = Volatile Organic Compound
UVCB Substance of unknown or Variable composition, Complex reaction products or Biological material
NOEC No Observed Effect Concentration
QSAR = Quantitative Structure–Activity Relationship

polyvinyl alcohol (PVA)
EC50 = Half maximal effective concentration
BCF = Bioconcentration Factor
LogPow = logarithm of the octanol/water partition coefficient
NOELR = No observed Effect Loading Rate
OECD = Organisation for Economic Co-operation and Development

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Asp. Tox. 1, H304	Calculation method

Full text of abbreviated H statements

H304	May be fatal if swallowed and enters airways.
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Full text of classifications [CLP/GHS]

Asp. Tox. 1	ASPIRATION HAZARD - Category 1
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Date of revision : 2023/07/24

previous revision date : 2023/04/26

Version : 2

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Manufacture of substance - Industrial

List of use descriptors : **Identified use name:** Manufacture of substance - Industrial
Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC15
Substance supplied to that use in form of: As such
Sector of end use: SU03, SU08, SU09, SU10
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC01, ERC04

Environmental contributing scenarios : Not applicable.

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Manufacture of the substance or use as an intermediate or a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived. Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Distribution of substance - Industrial

List of use descriptors : **Identified use name:** Distribution of substance - Industrial
Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC15
Substance supplied to that use in form of: As such
Sector of end use: SU03, SU08, SU09
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC01, ERC02, ERC03, ERC04, ERC05, ERC06a, ERC06b, ERC06c, ERC06d, ERC07

Environmental contributing scenarios : **Not applicable.**

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived.

Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Formulation and (re)packing of substances and mixtures - Industrial

List of use descriptors : **Identified use name:** Formulation and (re)packing of substances and mixtures - Industrial
Process Category: PROC01, PROC02, PROC03, PROC04, PROC05, PROC08a, PROC08b, PROC09, PROC14, PROC15
Substance supplied to that use in form of: As such
Sector of end use: SU03, SU10
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02

Environmental contributing scenarios : Not applicable.

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived. Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek

immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website: : Not available.

Exposure estimation and reference to its source - Environment: 1: Not applicable.

Exposure assessment (environment): : Not applicable.

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 2: Product characteristics

Exposure assessment (human): : Not applicable.

Exposure estimation and reference to its source : Not available.

Exposure estimation and reference to its source - Workers: 3: Not applicable.

Exposure assessment (human): : Not applicable.

Exposure estimation and reference to its source : Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment : Not applicable.

Health : Available hazard data do not support the need for a DNEL to be established for other health effects.
Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment : Not available.

Health : Not available.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Use in functional fluids - Industrial

List of use descriptors : **Identified use name:** Use in functional fluids - Industrial
Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09
Substance supplied to that use in form of: As such
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC07

Environmental contributing scenarios : Not applicable.

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in industrial equipment including maintenance and related material transfers.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived.

Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Use in functional fluids - Professional

List of use descriptors : **Identified use name:** Use in functional fluids - Professional
Process Category: PROC01, PROC02, PROC03, PROC08a, PROC09, PROC20
Substance supplied to that use in form of: As such
Sector of end use: SU22
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC09a, ERC09b

Environmental contributing scenarios : Not applicable.

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Use as functional fluids e.g. cable oils, transfer oils, coolants, insulators, refrigerants, hydraulic fluids in professional equipment including maintenance and related material transfers.

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived. Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Use in laboratories - Industrial
List of use descriptors : **Identified use name:** Use in laboratories - Industrial
Process Category: PROC10, PROC15
Substance supplied to that use in form of: As such
Sector of end use: SU03
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC02, ERC04
Environmental contributing scenarios : Not applicable.
Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Use of the substance within laboratory settings, including material transfers and equipment cleaning

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.
Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)
Physical state : Liquid
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)
Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived.

Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Use in laboratories - Professional

List of use descriptors : **Identified use name:** Use in laboratories - Professional
Process Category: PROC10, PROC15
Substance supplied to that use in form of: As such
Sector of end use: SU22
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC08a

Environmental contributing scenarios : Not applicable.

Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Use of small quantities within laboratory settings, including material transfers and equipment cleaning

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling worker exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.

Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)

Physical state : Liquid

Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)

Other conditions affecting workers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling worker exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived. Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Workers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.

Annex to the extended Safety Data Sheet (eSDS)

Consumer

Identification of the substance or mixture

Product definition : Mixture
Code : C3DPQMBPG
Product name : DC COOLING BIOLIFE 4

Section 1 - Title

Short title of the exposure scenario : Use in functional fluids - Consumer
List of use descriptors : **Identified use name:** Use in functional fluids - Consumer
Sector of end use: SU21
Subsequent service life relevant for that use: No.
Environmental Release Category: ERC09a, ERC09b
Market sector by type of chemical product: PC16, PC17
Environmental contributing scenarios : Not applicable.
Health Contributing scenarios : **Product characteristics**
Not applicable.

Processes and activities covered by the exposure scenario : Use of sealed items containing functional fluids e.g. transfer oils, hydraulic fluids, refrigerants

Section 2 - Exposure controls

Contributing scenario controlling environmental exposure for 1: Not applicable.

This substance is not classified for environmental hazards nor is a PBT/vPvB, an exposure assessment is not required

Contributing scenario controlling consumer exposure for 2: Product characteristics

Product characteristics : Substance is complex UVCB.
Concentration of substance in mixture or article : Covers percentage substance in the product up to 100% (unless stated differently)
Physical state : Liquid
Frequency and duration of use/exposure : Covers daily exposures up to 8 hours (unless stated differently)
Other given operational conditions affecting consumers exposure : Assumes a good basic standard of occupational hygiene has been implemented

Contributing scenario controlling consumer exposure for 3: Not applicable.

No exposure assessment presented for human health.

The CLP hazard statement H304 (May be fatal if swallowed and enters airways) relates to a risk of aspiration which is associated to a non-quantifiable hazard determined by kinematic viscosity. This risk may arise if swallowed but also in case of vomiting after ingestion. The toxicity hazard of aspiration, although being a hazard for health, does not result from any observed toxicological effect characterized by a dose-response. Therefore no DNEL can be derived. Operational Conditions (OCs) and implementation of Risk Management Measures (RMMs) need to be proportional to the degree of concern for the health hazard presented by the substance. The exposure by ingestion should not exist in the case of any permitted uses of the substance. The hazard statement H304 is related to a misuse that should not occur during the identified uses stated in section 1.2 of Material Safety Data Sheet (MSDS). In case of any risk, it should be controlled by implementing RMMs tailored specifically. For any substance classified H304, these RMMs should be communicated via the MSDS by the use of the following statement: « Do not ingest. If swallowed then seek immediate medical assistance », to cover this risk.

Section 3 - Exposure estimation and reference to its source

Website:	: Not available.
Exposure estimation and reference to its source - Environment: 1: Not applicable.	
Exposure assessment (environment):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Consumers: 2: Product characteristics	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.
Exposure estimation and reference to its source - Consumers: 3: Not applicable.	
Exposure assessment (human):	: Not applicable.
Exposure estimation and reference to its source	: Not available.

Section 4 - Guidance to DU to evaluate whether he works inside the boundaries set by the ES

Environment	: Not applicable.
Health	: Available hazard data do not support the need for a DNEL to be established for other health effects. Risk management measures are based on qualitative risk characterisation.

Additional good practice advice beyond the REACH CSA

Environment	: Not available.
Health	: Not available.