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LIQ-705 Coolant Fluid

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: July 19, 2022 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : LIQ-705xx Coolant Fluid ("xx" signifies liquid color)

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 : For use in cooling systems only

1.2.2. Uses advised against

Restrictions on use : Do not use in foodstuffs, beverages, or in other applications

1.3. Details of the supplier of the safety data sheet

Manufacturer

Koolance Korea

Koolance Bld, 40, Deokcheon-ro 34, Manan-gu, Anyang-si, Gyeonggi-do, South Korea 14088

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<https://www.koolance.com>

Only Representative (Not An Importer)

KTR Europe GmbH

65760, Mergenthalerallee 77, Frankfurt/Eschborn, Germany.

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1.4. Emergency telephone number

Emergency number : Kontaktieren Sie die nationalen Helpdesks, Liste der Telefonnummern: ÖSTERREICH (Wien) +43 1 515 61 0, BELGIEN (Brüssel) +32 070 245 245, BULGARIEN (Sofia) +359 2 9888 205, Kroatien +385 1 2348 342 TSCHECHISCHE REPUBLIK (Prag) +420 224 919 293 oder +420 224 915 402, DÄNEMARK (Kopenhagen) 82 12 12 12, Estland (Tallinn) 112, FINNLAND (Helsinki) +358 9 471 977, FRANKREICH (Paris) +33 1 45 42 59 59, DEUTSCHLAND (Berlin) +49 30 19240, GRIECHENLAND (Athen) +30 210 77 93 777, UNGARN (Budapest) +36 80 201 199, ISLAND (Reykjavik) +354 543 2222 oder 112, IRLAND (Dublin) +353 1 8379964 oder +353 1 809 2166, ITALIEN (Rom) +39 06 305 4343, LETTLAND (Riga) 112 oder +371 6704 2473, LITAUEN (Vilnius) +370 5 236 20 52 oder +370 687 53378, Luxemburg + 352 70 245 245, MALTA +356 2122 4071, NIEDERLANDE (Bilthoven) +31 30 274 88 88, NORWEGEN (Oslo) 22 591300, POLEN (Danzig) +48 58301 65 16 oder +48 58 349 2831, PORTUGAL (Lissabon) 808 250 143, RUMÄNIEN (Bukarest) +40 21 3183606 SLOWAKEI (Bratislava) +421 2 54 77 416 6, SLOWENIEN (Ljubljana) + 386 41 650 500, SPANIEN +34 91 562 04 20 (spanische Sprache) oder +34 91 768 98 00 (Sie können Englisch beantragen), SCHWEDEN (Stockholm) 112 oder +46 10 456 6700 (Mo-Fr 9.00-17.00 Uhr), VEREINIGTES KÖNIGREICH (London) 112 oder 0845 4647 (NHS Direktwahl)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2 H315

Serious eye damage/eye irritation, Category 2 H319

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

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye irritation.

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2.2. Label elements

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

Hazard pictograms (CLP)



GHS07

Signal word (CLP)

: Warning

Hazard statements (CLP)

: H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Precautionary statements (CLP)

: P264 - Wash hands, forearms and face thoroughly after handling.

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

P302+P352 - IF ON SKIN: Wash with plenty of water.

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

P321 - Specific treatment (see supplemental first aid instruction on this label).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

Component	
1,2-propanediol (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
Methyl-1H-Benzotriazole (29385-43-1)	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
Sodium benzoate (532-32-1)	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 %

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]
1,2-propanediol	CAS-No.: 57-55-6 EC-No.: 200-338-0	50 – 55	Skin Irrit. 2, H315 Eye Irrit. 2, H319
Water	CAS-No.: 7732-18-5 EC-No.: 231-791-2	45 – 50	Not classified
Methyl-1H-Benzotriazole	CAS-No.: 29385-43-1 EC-No.: 249-596-6	< 1	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation:dust,mist), H332 Aquatic Chronic 2, H411 Repr. 2, H361d

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium benzoate	CAS-No.: 532-32-1 EC-No.: 208-534-8	< 1	STOT RE 2, H373 Aquatic Chronic 3, H412

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

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects after skin contact : Irritation.
- Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Take up liquid spill into absorbent material.
- Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool.

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

1,2-propanediol (57-55-6)	
Croatia - Occupational Exposure Limits	
Local name	Propane-1,2-diol
GVI (OEL TWA) [1]	474 mg/m ³ ukupno pare i čestice 10 mg/m ³ samo čestice
GVI (OEL TWA) [2]	150 ppm ukupno pare i čestice
Regulatory reference	Pravilnik o zaštiti radnika od izloženosti opasnim kemikalijama na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
Ireland - Occupational Exposure Limits	
Local name	Propane-1,2-diol [Propylene glycol]
OEL TWA [1]	470 mg/m ³ total (vapour and particulates) 10 mg/m ³ particulates
OEL TWA [2]	150 ppm total (vapour and particulates)
Regulatory reference	Chemical Agents Code of Practice 2021
Latvia - Occupational Exposure Limits	
Local name	Propilēnglikols (1,2-propāndiols)
OEL TWA	7 mg/m ³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325
Lithuania - Occupational Exposure Limits	
Local name	Propilenglikolis
IPRV (OEL TWA)	7 mg/m ³
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Poland - Occupational Exposure Limits	
Local name	Propano-1,2-diol

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1,2-propanediol (57-55-6)	
NDS (OEL TWA)	100 mg/m ³ pary i frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikaćca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
United Kingdom - Occupational Exposure Limits	
Local name	Propane-1,2-diol
WEL TWA (OEL TWA) [1]	474 mg/m ³ 10 mg/m ³
WEL TWA (OEL TWA) [2]	150 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Norway - Occupational Exposure Limits	
Local name	Propan-1,2-diol
Grænseverdi (OEL TWA) [1]	79 mg/m ³
Grænseverdi (OEL TWA) [2]	25 ppm
Regulatory reference	FOR-2021-06-28-2248
Sodium benzoate (532-32-1)	
Belgium - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ 10 mg/m ³
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m ³ 5 mg/m ³ (La valeur limite concerne la fraction alvéolaire)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	10 mg/m ³ (E)
Peak exposure limitation factor	2(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; H - hautresorptiv
Regulatory reference	TRGS900
Slovenia - Occupational Exposure Limits	
Local name	natrijev benzoat (računano kot benzoat)
OEL TWA	10 mg/m ³
OEL STEL	20 mg/m ³
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³ 4 mg/m ³

8.1.2. Recommended monitoring procedures

No additional information available

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8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Not available
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: > 98 °C
Flammability	: Non flammable.
Explosive properties	: No self-reaction hazard; UN TDG test & criteria – Test E3.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 117 °C (Cleveland open cup). No flash occurred under 93°C (Tag closed cup)

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Auto-ignition temperature	: No spontaneous combustion under 300°C
Decomposition temperature	: Not available
pH	: 5.5 – 6.5 at 20°C
Viscosity, kinematic	: Not available
Viscosity, dynamic	: 4.3 mPa.s at 20°C
Solubility	: Soluble at 20°C.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
Relative density	: 1.089 at 20°C
Relative vapour density at 20 °C	: Not available
Particle characteristics	: Not applicable

1,2-propanediol (57-55-6)

Boiling point	187.6 °C
Flash point	104 °C (Closed cup, 1000 hPa, EU Method A.9: Flash-Point)
Auto-ignition temperature	> 400 °C (1000 - 1001 hPa, EU Method A.15: Auto-ignition Temperature (liquids and gases), T2)
Vapour pressure	0.2 hPa (25 °C, EU Method A.4: Vapour Pressure)
Vapour pressure at 50 °C	1.8 hPa (Antoine equation)
Particle size	Not applicable (liquid)

Water (7732-18-5)

Boiling point	100 °C
Vapour pressure	2300 Pa 25°C

Methyl-1H-Benzotriazole (29385-43-1)

Boiling point	> 300 °C (Not applicable (decomposes), EU Method A.2: Boiling point)
Flash point	190 °C (Closed cup)
Auto-ignition temperature	No data available in the literature
Vapour pressure	0.04 hPa (20 °C)
Particle size	No data available in the literature

Sodium benzoate (532-32-1)

Boiling point	465 °C
Flash point	> 100 °C
Auto-ignition temperature	560 °C (T1)
Vapour pressure	< 0.01 hPa (20 °C)

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

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SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

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

1,2-propanediol (57-55-6)

LD50 oral rat	22000 mg/kg (Rat, Male / female, Experimental value, Oral)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (24 h, Rabbit, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 44.9 mg/l Animal: rat, Guideline: other., Remarks on results: other:

Water (7732-18-5)

LD50 oral	> 90000 mg/kg bodyweight
LD50 dermal	> 90000 mg/kg bodyweight

Methyl-1H-Benzotriazole (29385-43-1)

LD50 oral rat	720 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 oral	720 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal, 14 day(s))
LD50 dermal	> 2000 mg/kg bodyweight
LC50 Inhalation - Rat	> 1.73 mg/l (1 h, Rat, Literature study, Inhalation (dust))
LC50 Inhalation - Rat (Dust/Mist)	> 1730 mg/l

Sodium benzoate (532-32-1)

LD50 oral rat	3450 mg/kg bodyweight Animal: rat, 95% CL: 3150 - 3740
LD50 oral	2100 mg/kg bodyweight
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit

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Sodium benzoate (532-32-1)	
LC50 Inhalation - Rat	> 12.2 mg/l/4h Animal: rat

1,2-propanediol (57-55-6)	
pH	6.5 – 7.5 (50 %)

Skin corrosion/irritation	: Causes skin irritation. pH: 5.5 – 6.5 at 20°C
Serious eye damage/irritation	: Causes serious eye irritation. pH: 5.5 – 6.5 at 20°C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified

Methyl-1H-Benzotriazole (29385-43-1)	
pH	6 (0.1 %)

Sodium benzoate (532-32-1)	
pH	7 – 8 (5 %)

1,2-propanediol (57-55-6)	
In vivo	Chromosomal abnormality test using mammalian bone marrow cells: Negative (rat, male)
In vitro	Bacterial reverse mutation test: Negative (TA92, TA94, TA98, TA100, TA1535, and TA1537, with metabolic activation system)

Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

1,2-propanediol (57-55-6)	
NOAEL (subchronic, oral, animal/male, 90 days)	443 mg/kg bodyweight Animal: cat, Animal sex: male

Methyl-1H-Benzotriazole (29385-43-1)	
NOAEL (oral, rat, 90 days)	≈ 150 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)

Sodium benzoate (532-32-1)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat
NOAEL (dermal, rat/rabbit, 90 days)	> 2500 mg/kg bodyweight Animal: rabbit, Guideline: EPA OPP 82-2 (Repeated Dose Dermal Toxicity -21/28 Days)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	≤ 0.025 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard	: Not classified
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Methyl-1H-Benzotriazole (29385-43-1)	
Viscosity, kinematic	Not applicable (solid)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	

1,2-propanediol (57-55-6)	
LC50 - Fish [1]	40613 mg/l (96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value)
LC50 - Fish [2]	51400 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	18340 mg/l Ceriodaphnia dubia (EPA 600/4-90/0-27, statistic test, fresh water)
EC50 72h - Algae [1]	24200 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	19300 mg/l Test organisms (species): Skeletonema costatum
EC50 96h - Algae [1]	19000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	19100 mg/l Test organisms (species): Skeletonema costatum
ErC50 algae	24200 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC chronic crustacea	1000 mg/l
NOEC chronic algae	1000 mg/l

Methyl-1H-Benzotriazole (29385-43-1)	
LC50 - Fish [1]	55 mg/l (Equivalent or similar to OECD 203, 96 h, Cyprinodon variegatus, Semi-static system, Salt water, Experimental value)
EC50 - Other aquatic organisms [1]	15.8 mg/l Test organisms (species): other aquatic crustacea:
EC50 - Other aquatic organisms [2]	8.58 mg/l Test organisms (species): other aquatic crustacea:
EC50 72h - Algae [1]	53 mg/l (ISO 10253, Skeletonema costatum, Static system, Salt water, Experimental value, Growth rate)
LOEC (chronic)	37.6 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	18.4 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

Sodium benzoate (532-32-1)	
LC50 - Fish [1]	484 mg/l (EPA OPP 72-1, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
EC50 - Other aquatic organisms [1]	> 100 mg/l waterflea
EC50 - Other aquatic organisms [2]	30.5 mg/l

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Sodium benzoate (532-32-1)	
EC50 72h - Algae [1]	> 30.5 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic fish	10 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '144 h'

12.2. Persistence and degradability

1,2-propanediol (57-55-6)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.96 – 1.08 g O ₂ /g substance
Chemical oxygen demand (COD)	1.63 g O ₂ /g substance
ThOD	1.69 g O ₂ /g substance

Methyl-1H-Benzotriazole (29385-43-1)	
Persistence and degradability	Not readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
Chemical oxygen demand (COD)	1.83 g O ₂ /g substance

Sodium benzoate (532-32-1)	
Persistence and degradability	Readily biodegradable in water.

12.3. Bioaccumulative potential

1,2-propanediol (57-55-6)	
BCF - Fish [1]	0.09 mg/l
Partition coefficient n-octanol/water (Log Pow)	-1.07 (Experimental value, EU Method A.8: Partition Coefficient, 20.5 °C)
Bioaccumulative potential	Not bioaccumulative.

Water (7732-18-5)	
Partition coefficient n-octanol/water (Log Pow)	-1.38

Methyl-1H-Benzotriazole (29385-43-1)	
BCF - Fish [1]	2.4 l/kg (BCFBAF v3.00)
BCF - Other aquatic organisms [1]	4.168 (BCFWIN, Calculated value)
Partition coefficient n-octanol/water (Log Pow)	1.079 – 1.083 (Practical experience/observation, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Sodium benzoate (532-32-1)	
Partition coefficient n-octanol/water (Log Pow)	1.88 (Read-across)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

1,2-propanediol (57-55-6)	
Surface tension	71.6 mN/m (21.5 °C, 1.01 g/l, EU Method A.5: Surface tension)

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1,2-propanediol (57-55-6)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.46 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
Methyl-1H-Benzotriazole (29385-43-1)	
Ecology - soil	No (test)data on mobility of the substance available.
Sodium benzoate (532-32-1)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.219 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

LIQ-705 Coolant Fluid
Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH 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 of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

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

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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)

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(b)	LIQ-705 Coolant Fluid ; Koolance - 1,2- propanediol	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

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PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

15.1.2. National regulations

France

Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1).

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : B(4) - low hazard for aquatic organisms

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Pregnant/breastfeeding women working with the product must not be in direct contact with the product

Switzerland

Storage class (LK) : LK 10/12 - Liquids

CH - VOC (SR 814.018) : 0.0000000000000000 %

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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Full text of H- and EUH-statements:	
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2

The classification complies with : ATP 12

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.