

Product form

Product name

LIQ-702 Coolant Fluid

: LIQ-702 Coolant Fluid

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier

: Mixture

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Date of issue: 23/7/2019 Revision date: 23/7/2019 Version: 1.0

1.2. Relevant identified uses of the subst	ance or mixture and uses advised against
1.2.1. Relevant identified uses For use in cooling systems only	
1.2.2. Uses advised against Do not use in foodstuffs, beverages, or in other a	
1.3. Details of the supplier of the safety d	ata sheet
Manufacturer Koolance Korea	
Koolance Rolea Koolance Bld, 40, Deokcheon-ro 34, Manan-gu, Anyang-si, Gyeonggi-do, South Korea 14088 Telephone: (U.S.) +01 253-249-7669, Fax: (U.S.)	+01 253-249-7453
1.4. Emergency telephone number	
245, BULGARIA (Sofia) +359 2 9888 205, Croatia DENMARK (Copenhagen) 82 12 12 12, ESTONIA GERMANY (Berlin) +49 30 19240, GREECE (Ath +354 543 2222 or 112, IRELAND (Dublin) +353 1 2473, LITHUANIA (Vilnius) +370 5 236 20 52 or + (Bilthoven) +31 30 274 88 88, NORWAY (Oslo) 2 808 250 143, ROMANIA (Bucharest) +40 21 3183	Numbers : AUSTRIA (Vienna Wien) +43 1 515 61 0, BELGIUM (Brussels Bruxelles) +32 070 2 a +385 1 2348 342 CZECH REPUBLIC (Prague Praha) +420 224 919 293 or +420 224 915 40 A (Tallinn) 112, FINLAND (Helsinki) +358 9 471 977, FRANCE (Paris) +33 1 45 42 59 59, iens Athinai) +30 210 77 93 777, HUNGARY (Budapest) +36 80 201 199, ICELAND (Reykjavik 8379964 or +353 1 809 2166, ITALY (Rome) +39 06 305 4343, LATVIA (Riga) 112 or +371 67 •370 687 53378, Luxembourg +352 70 245 245, MALTA +356 2122 4071, NETHERLANDS 2 591300, POLAND (Gdansk) +48 58301 65 16 or +48 58 349 2831, PORTUGAL (Lisbon Lisb 3606 SLOVAKIA (Bratislava) +421 2 54 77 4166, SLOVENIA (Ljubljana) + 386 41 650 500, SP. 68 98 00(You can request to be served in English), SWEDEN (Stockholm) 112 or +46 10 456 ondon) 112 or 0845 4647 (NHS Direct).
SECTION 2: Hazards identification 2.1. Classification of the substance or mi	xture
Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2 Full text of H statements : see section 16	H315 H319
Adverse physicochemical, human health and Causes skin irritation. Causes serious eye irritation 2.2. Label elements	
Labelling according to Regulation (EC) No. 12 Hazard pictograms (CLP)	72/2008 [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. P302+P352 - IF ON SKIN: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remo 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. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.
2.3. Other hazards	
No additional information available	
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SECTION 3: Composition/information on ingredients			
3.1. Substances			
Not applicable			
3.2. Mixtures	3.2. Mixtures		
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Water	(CAS-No.) 7732-18-5 (EC-No.) 231-791-2	70 - 75	Not classified
1,2-propanediol	(CAS-No.) 57-55-6 (EC-No.) 200-338-0	25 - 30	Not classified
Others (Proprietary)		0.2 - 2	Not classified

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 substa Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	. Toxic fumes may be released.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release mea	asures
6.1. Personal precautions, protective e	quipment 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 containm	ent 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.
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	g any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	
No additional information available	

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SECTION 8: Exposure controls/personal protection
8.1. Control parameters
No additional information available
8.2. Exposure controls
Appropriate engineering controls:
Ensure good ventilation of the work station.
Hand protection:
Protective gloves
Eye protection:
Safety glasses
Skin and body protection:
Wear suitable protective clothing
Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and che		
Physical state	: Liquid	
Colour	: No data available	
Odour	: No data available	
Odour threshold	: No data available	
рН	: 7.0 – 8.0 at 20°C; Sample H2O = 1:5 (V/V)	
Relative evaporation rate (butylacetate=1)	: No data available	
Melting point	: Not applicable	
Freezing point	: No data available	
Boiling point	: >98°C	
Flash point	: 118ºC (Cleveland open cup). No flash occurred under 93ºC (Tag closed cup	
Auto-ignition temperature	: No spontaneous combustion under 300°C	
Decomposition temperature	: No data available	
Flammability (solid, gas)	: Not applicable	
Vapour pressure	: No data available	
Relative vapour density at 20 °C	: No data available	
Relative density	: 1.03 at 20°C	
Solubility	: Soluble at 20°C	
Log Pow	: No data available	
Viscosity, kinematic	: 2.3 mPa x s (cP) at 20°C	
Viscosity, dynamic	: No data available	
Explosive properties	: No self-reaction hazard; UN TDG test & criteria – Test E3	
Oxidising properties	: No data available	
Explosive limits	: No data available	
9.2. Other information		

No additional information available

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
Strong oxidizing agents

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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 toxicological effects	
Acute toxicity (oral)	: Not classified
	rat LD50: 23,779 mg/kg
Acute toxicity (dermal)	: Not classified
	rabbit LD50:38,021 mg/kg
Acute toxicity (inhalation)	: Not classified
	rat LC50: 145 mg/l
Skin corrosion/irritation	: Irritating (Calculated, Category 2)
Serious eye damage/irritation	: Irritating (Calculated, Category 2)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classifiable; from IARC / EC ESIS
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

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.
Acute aquatic toxicity	: Not classified
	Fish LC50 : 8,700mg/l 96hr Pimephales promelas
	Crustacean LC50: 7,921mg/l 48hr Daphnia magna
	Bird EC50: 1,634mg/l 72hr Selenastrum capricornutu
Chronic aquatic toxicity	: Not classified
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment	
No additional information available	
12.6. 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

TSCA: All ingredients are listed on the TSCA inventory DOT Classification: Not a DOT controlled material (U.S.) UN TDG: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods Marine pollution: Not applicable Special precaution: • Fire EmS Guide: F-E (Recommendation)

Spillage EmS Guide: Not dangerous goods

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SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:	
Reference code	Applicable on
3(b) LIQ-702 Coolant Fluid	
Contains no substance on the REACH candidate list	

Contains no REACH Annex XIV substances

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.

Substance(s) are not subject to Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC.

15.1.2. National regulations

Germany

Reference to AwSV	: Water hazard class (WGK) 2, Significantly hazardous to water (Classification according to AwSV, Annex 1)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Netherlands	
SZW-lijst van kankerverwekkende stoffen	: None of the components are listed
SZW-lijst van mutagene stoffen	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	: None of the components are listed
15.2. Chemical safety assessment	
No chemical safety assessment has been carried ou	ıt

SECTION 16: Other information

Full text of H- and EUH-statements:	
H315	Causes skin irritation.
H319	Causes serious eye irritation.

[References]:

Physical and chemical properties: EC ESIS, US NLM Toxic and ecological information: OECD SIDS, IUCLID, US NLM, IARC, EC ESIS, CCRIS

[Acronyms and Websites]

EC ESIS : European chemical Substances Information System, http://esis.jrc.ec.europa.eu/ IUCLID : International Uniform Chemical Information Database, http://esis.jrc.ec.europa.eu/ US NLM : U.S. National Library of Medicine, http://chem.sis.nlm.nih.gov/chemidplus/ HSDB : US Hazardous Substances Data Bank, http://toxnet.nlm.nih.gov/ CCRIS : US Chemical Carcinogenesis Research Information System, http://toxnet.nlm.nih.gov/ IARC : International Agency for Research on Cancer, http://monographs.iarc.fr

SDS EU (REACH Annex II)

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.

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