	SAFET	TY DATA SHEET							
	according to Commissio	on Regulation (EU) 2020/878 as amended							
	HVAC Internal Greaseclean								
Creat	ion date 18th April 2023								
Revis	ion date	Version 1.0							
SECT	ION 1: Identification of the substance/n	nixture and of the company/undertaking							
1.1.	Product identifier	HVAC Internal Greaseclean							
	Substance / mixture	mixture							
1.2. Relevant identified uses of the substance or mixture and uses advised against									
	Mixture's intended use								
	Universal evaporator and drip tray cleaner devices, as well as air filters.	for internal units of air conditioning, air conditioning-ventilation							
	Mixture uses advised against								
	The product should not be used in ways ot	her than those referred in Section 1.							
1.3.	Details of the supplier of the safety da	ta sheet							
	Supplier								
	Name or trade name	Liquid Technologies Sp. z o.o.							
	Address	ul. Gdańska 13, Wrocław, 50-344							
		Poland							
	Identification number (CRN)	368412743							
	VAT Reg No	PL8982237296							
	Phone	+48 518 90 92 94							
	E-mail	info@ltchem.pl							
	Web address	www.ltchem.pl							
	Competent person responsible for the	-							
	Name	Liquid Technologies Sp. z o.o.							
	E-mail	info@ltchem.pl							
1.4.	Emergency telephone number								
	European emergency number: 112								

### **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

Full text of all classifications and hazard statements is given in the section 16.

### 2.2. Label elements

none

### 2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

### SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

### Chemical characterization

Mixture of substances and additives specified below.

# Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	<b>j</b>	Note
CAS: 57-55-6 EC: 200-338-0 Registration number: 01-2119456809-23	Propane-1,2-diol	2-4		



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Full text of all classifications and hazard statements is given in the section 16.

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

### If inhaled

Terminate the exposure immediately; move the affected person to fresh air.

### If on skin

Remove contaminated clothes. If irritation occurs, rinse the skin with a stream of water.

### If in eyes

Rinse carefully with water for several minutes. Remove contact lenses, if present and easy to do. **If swallowed** 

Rinse out the mouth with clean water. In the event of issues, find medical help.

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

If inhaled Not expected. If on skin Not expected. If in eyes Not expected. If swallowed Not expected.

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

### **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

Suitable extinguishing media Accommodate extinguishing components to the location of fire. Unsuitable extinguishing media not available

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

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

### 5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves. Use a self-contained breathing apparatus and full-body protective clothing.

### **SECTION 6: Accidental release measures**

- **6.1. Personal precautions, protective equipment and emergency procedures** Follow the instructions in the Sections 7 and 8.
- **6.2.** Environmental precautions Prevent contamination of the soil and entering surface or ground water.
- **6.3.** Methods and material for containment and cleaning up After removal of the product, wash the contaminated site with plenty of water.

# **6.4.** Reference to other sections See the Section 7, 8 and 13.



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Precautions for safe handling Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health

#### 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

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

protection.

**SECTION 7: Handling and storage** 

not available

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

#### 8.1. **Control parameters**

The mixture contains substances for which occupational exposure limits are set.

DNEL

Propane-1,2-diol

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers (0)	Inhalation	168 mg/m³	Chronic effects systemic		ECHA
Workers (0)	Inhalation	10 mg/m <sup>3</sup>	Chronic effects local		ECHA
Consumers (0)	Inhalation	50 mg/m <sup>3</sup>	Chronic effects systemic		ECHA
Consumers (0)	Inhalation	10 mg/m <sup>3</sup>	Chronic effects systemic		ECHA

#### PNEC

Propane-1,2-diol

Route of exposure	Value	Value determination	Source
Drinking water	260 mg/l		ECHA
Water (intermittent release)	183 mg/l		ECHA
Marine water	26 mg/l		ECHA
Microorganisms in sewage treatment	20 mg/l		ECHA
Freshwater sediment	572 mg/kg of food		ECHA
Sea sediments	57.2 mg/kg of food		ECHA

#### 8.2. **Exposure controls**

Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

### Eye/face protection

It is not needed.

### Skin protection

When handling in long-term or repeatedly, use protective gloves.

### **Respiratory protection**

Halfmask with a filter against organic vapours or a self-contained breathing apparatus as appropriate if exposure limit values of substances are exceeded or in a poorly ventilated environment.

**Thermal hazard** 

Not available.

### **Environmental exposure controls**

Observe usual measures for protection of the environment, see Section 6.2.

### **SECTION 9: Physical and chemical properties**

Information on basic physical and chemical properties 9.1.



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	Physical state	liquid	
	Colour	blue	
	Odour	characteristic	
	Melting point/freezing point	data not available	
	Boiling point or initial boiling point and boiling range	data not available	
	Flammability	data not available	
	Lower and upper explosion limit	data not available	
	Flash point	data not available	
	Auto-ignition temperature	data not available	
	Decomposition temperature	data not available	
	рН	8-9 (undiluted at 20 °C)	)
	Kinematic viscosity	data not available	
	Solubility in water	soluble	
	Partition coefficient n-octanol/water (log value)	not determined	
	Vapour pressure	data not available	
	Density and/or relative density		
	Density	1,0 g/cm <sup>3</sup> at 20 °C	
	Relative vapour density	data not available	
	Particle characteristics	does not apply to mixtu	res
Э.2.	Other information		
	not available		

The product is stable under normal conditions.

**10.3.** Possibility of hazardous reactions Unknown.

### **10.4.** Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

### **SECTION 11: Toxicological information**

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

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the mixture.

### Acute toxicity

Based on available data the classification criteria are not met.

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Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	ATE	250000000 mg/kg				Calculation of value



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Propage-1 2-diol

Proparie-1,2-diol						
Route of exposure	Parameter	Value	Exposure time	Species	Sex	Value determination
Oral	LD50	22000 mg/kg		Rat (Rattus norvegicus)		
Dermal	LD50	>2000 mg/kg		Rabbit		
Inhalation	LC50	>317 mg/l	2 hours	Rabbit		

### Skin corrosion/irritation

Based on available data the classification criteria are not met.

Propane-1,2-diol

Route of exposure	Result	Exposure time	Species
	Not irritating		

### Serious eye damage/irritation

Based on available data the classification criteria are not met.

### Propane-1,2-diol

Route of exposure	Result	Exposure time	Species
Not irritating			

### Sensitization

Propane-1,2-diol

Route of exposure	Result	Exposure time	Species	Sex
Skin	Not sensitizing			

### Respiratory or skin sensitisation

Based on available data the classification criteria are not met.

### Germ cell mutagenicity

### Carcinogenicity

Based on available data the classification criteria are not met.

### Propane-1,2-diol

I	Route of exposure	Parameter	Value	Result	Species	Sex
				Negative		

### Reproductive toxicity

Based on available data the classification criteria are not met.

Propane-1,2-diol

Effect	Parameter	Value	Result	Species	Sex
			Negative		

### Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

### Aspiration hazard

Based on available data the classification criteria are not met.

### 11.2. Information on other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### **SECTION 12: Ecological information**

### 12.1. Toxicity



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### Acute toxicity

The product is not classified as hazardous to the aquatic environment.

Propane-1,2-diol

Parameter	Value	Exposure time	Species	Environment
LC50	40613 mg/l	96 hours	Fish (Oncorhynchus mykiss)	
EC50	18340 mg/l	48 hours	Invertebrates (Ceriodaphnia dubia)	
EC50			Algae (Skeletonema costatum)	
NOEC	2000 mg/l	96 hours	Bacteria (Pseudomonas putida)	

#### Chronic toxicity Propane-1,2-diol

Parameter	Value	Exposure time	Species	Environment
NOEC	13020 mg/l	72 days	Invertebrates (Ceriodaphnia dubia)	

### 12.2. Persistence and degradability

Biodegradability

Propane-1,2-diol

Parameter	Value	Exposure time	Environment	Result
				Easily biodegradable

The mixture is biodegradable.

### 12.3. Bioaccumulative potential

Propane-1,2-diol	
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Parameter	Value	Exposure time	Species	Environment	Temperature [°C]
Log Pow	-1.07				
BCF	0.09				

No data for the mixture.

### 12.4. Mobility in soil

No data for the mixture.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### **12.6.** Endocrine disrupting properties

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## 12.7. Other adverse effects

Not available.

### SECTION 13: Disposal considerations

### **13.1.** Waste treatment methods

Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.



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### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

### **SECTION 14: Transport information**

- 14.1. UN number or ID number not subject to transport regulations14.2. UN proper shipping name
- not relevant
- 14.3. Transport hazard class(es) not relevant
- 14.4. Packing group not relevant
- 14.5. Environmental hazards not relevant
- **14.6.** Special precautions for user Reference in the Sections 4 to 8.
- **14.7.** Maritime transport in bulk according to IMO instruments not relevant

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### **SECTION 15: Regulatory information**

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

### 15.2. Chemical safety assessment

A safety assessment for the mixture is not required.

### **SECTION 16: Other information**

### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet		
		European agreement concerning the international carriage of dangerous goods by road
	BCF	Bioconcentration Factor
	CAS	Chemical Abstracts Service
	CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
	EC	Identification code for each substance listed in EINECS
	EC₅o	Concentration of a substance when it is affected 50% of the population
	EINECS	European Inventory of Existing Commercial Chemical Substances
	EmS	Emergency plan
	EU	European Union
	EuPCS	European Product Categorisation System



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ΙΑΤΑ	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD50	Lethal dose of a substance in which it can be expected death of 50% of the population
log Kow	Octanol-water partition coefficient
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Training guidelines	

### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### **Recommended restrictions of use**

### not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### More information

Classification procedure - calculation method.

### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.