|  | 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<br>% weight | <b>j</b> | Note |
|---|------------------|------------------------|----------|------|
| CAS: 57-55-6<br>EC: 200-338-0<br>Registration number:<br>01-2119456809-23 | Propane-1,2-diol | 2-4                    |          |      |



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

Creation date Revision date

Version

1.0

------

18th April 2023

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.



according to Commission Regulation (EU) 2020/878 as amended

### **HVAC Internal Greaseclean**

Creation date Revision date

7.1.

18th April 2023

Version

1.0

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 /<br>consumers | Route of exposure | Value                | Effect                   | Value<br>determination | Source |
|------------------------|-------------------|----------------------|--------------------------|------------------------|--------|
| Workers (0)            | Inhalation        | 168<br>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.



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

| Croati | an data 19th Annil 2022                                  |                                |     |
|--------|--|--------------------------------|-----|
|        | on date 18th April 2023                                  | Manajan                        | 1.0 |
| Kevisi | on date  | Version                        | 1.0 |
|        | 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.

HVAC Internal Greaseclean

| Route of exposure | Parameter | Value           | Exposure<br>time | Species | Sex | Value<br>determination |
|-------------------|-----------|-----------------|------------------|---------|-----|------------------------|
| Oral              | ATE       | 250000000 mg/kg |                  |         |     | Calculation of value   |



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

Creation date Revision date 18th April 2023

Version

1.0

Propage-1 2-diol

| Proparie-1,2-diol |           |             |                  |                         |     |                        |
|-------------------|-----------|-------------|------------------|-------------------------|-----|------------------------|
| Route of exposure | Parameter | Value       | Exposure<br>time | Species                 | Sex | Value<br>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



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

Creation date Revision date 18th April 2023

Version

1.0

### 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<br>(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<br>(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 |  |
|------------------|--|
|------------------|--|

| Parameter | Value | Exposure time | Species | Environment | Temperature<br>[°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.



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

Creation date Revision date

Version

1.0

### 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

18th April 2023

### **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  |
|   |        |   |



according to Commission Regulation (EU) 2020/878 as amended

## **HVAC Internal Greaseclean**

|                     | HVAC Internal Greaseclean  |
|---------------------|--|
| Creation date       | 18th April 2023  |
| Revision date       | Version 1.0  |
| ΙΑΤΑ                | International Air Transport Association  |
| IBC                 | International Code For The Construction And Equipment of Ships Carrying<br>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<br>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.