

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2017

Version number 1

Revision: 28.03.2017

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

- **1.1 Product identifier**
- **Trade name: Citrus Hochleistungsreiniger**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Detergent spray
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Fermit GmbH  
Zur Heide 4,  
D- 53560 Vettelschoß  
www.fermit.de
- **Informing department:**  
Tel.: +49 (0) 2645-2207  
Fax: +49 (0) 2645-3113  
Email: info@fermit.de
- **1.4 Emergency telephone number:** Tel.: +49 (0) 2645-2207

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Aerosol 1	H222-H229	Extremely flammable aerosol. Pressurised container: May burst if heated.
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GHS09 environment

Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.
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GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H336	May cause drowsiness or dizziness.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.

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**Trade name: Citrus Hochleistungsreiniger**

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**Hazard pictograms**


GHS02 GHS07 GHS09

**Signal word** Danger

**Hazard-determining components of labelling:**

D-limonene  
Solvent naphtha (petroleum), light aliph.  
propan-2-ol

**Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
  
P251 Do not pierce or burn, even after use.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
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. Remove contact lenses, if present and easy to do. Continue rinsing.  
  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**2.3 Other hazards**
**Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

**3.2 Chemical characterisation: Mixtures**

• **Description:** Mixture of the substances listed below including additives not requiring identification.

**Dangerous components:**

CAS: 67-63-0 EINECS: 200-661-7 Reg.nr.: 01-2119457558-25-X	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25 - 50%
CAS: 64742-89-8 EINECS: 265-192-2	Solvent naphtha (petroleum), light aliph. ⚠ Flam. Liq. 2, H225; ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ STOT SE 3, H336	10-<25%
CAS: 5989-27-5 EINECS: 227-813-5 Reg.nr.: 01-2119529223-47-X	D-limonene ⚠ Flam. Liq. 3, H226; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	10-<25%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21-X	propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	≤10%

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CAS: 75-28-5 EINECS: 200-857-2 Reg.nr.: 01-2119485395-27-X	isobutane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	≤10%
CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide ⚠ Press. Gas L, H280	≤10%

- **Components according to regulation EC 648/2004 on detergents**

perfumes (LIMONENE)

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation** Take affected persons into the open air and position comfortably
- **After skin contact**  
Wash with water and soap.  
In cases of freeze burns, rinse with plenty of water. Do not remove clothing.  
In case of skin irritations or sensitizing effects, consult doctor.
- **After eye contact**  
Rinse opened eye for several minutes under running water.  
In case of permanent aches and pains please go and see the doctor.
- **After swallowing** Swallowing is not considered to be a possible way of exposure.
- **4.2 Most important symptoms and effects, both acute and delayed** Allergic reactions
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fire with alcohol-resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Pressure build-up and risk of bursting when heated.  
During incomplete combustion carbon monoxide can be formed.  
Vapours are heavier than air and may travel long distances along ground, ignite and flash back to source.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
In case of fire wear breathing equipment being independent of ambient air and suit provided full protection against chemicals.
- **Additional information**  
Cool endangered containers with water spray.  
Remove goods in stock from incendiary zone, if possible.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep away from sources of ignition - No smoking.  
Do not inhale vapours.
- **6.2 Environmental precautions:**  
Damp down gases/fumes/haze with water spray jet.  
Do not allow to enter drainage system, surface or ground water.

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- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Keep away from heat and direct sunlight.  
Keep empty containers away from heat and ignition sources.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use.  
Do not spray on flames or red-hot objects.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in cool, dry conditions in well sealed containers.  
Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
WEL: workplace exposure limit  
IOELV: Indicative Occupational Exposure Limit Values, workplace threshold value of the European Union

#### 67-63-0 propan-2-ol

WEL (Great Britain)	Short-term value: 1250 mg/m <sup>3</sup> , 500 ppm Long-term value: 999 mg/m <sup>3</sup> , 400 ppm
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#### 124-38-9 carbon dioxide

WEL (Great Britain)	Short-term value: 27400 mg/m <sup>3</sup> , 15000 ppm Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm
IOELV (European Union)	Long-term value: 9000 mg/m <sup>3</sup> , 5000 ppm

- **DNELs**

#### 67-63-0 propan-2-ol

Oral	DNEL (consumer, long-term, systemic)	26 mg/kg bw/day (human)
Dermal	DNEL (worker, long-term, systemic)	888 mg/kg bw/day (human)
	DNEL (consumer, long-term, systemic)	319 mg/kg bw/day (human)
Inhalative	DNEL (worker, long-term, systemic)	500 mg/m <sup>3</sup> (human)
	DNEL (consumer, long-term, systemic)	89 mg/m <sup>3</sup> (human)

#### 5989-27-5 D-limonene

Oral	DNEL (consumer, long-term, systemic)	4.76 mg/kg bw/day (human)
Dermal	DNEL (worker, short-term, local)	0.222 mg/kg bw/day (human)

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Inhalative	DNEL (consumer, short-term, local)	0.111 mg/kg bw/day (human)
	DNEL (worker, long-term, systemic)	33.3 mg/m <sup>3</sup> (human)
	DNEL (consumer, long-term, systemic)	8.3 mg/m <sup>3</sup> (human)

· **PNECs**

**67-63-0 propan-2-ol**

PNEC aqua (freshwater)	140.9 mg/L (.)
PNEC aqua (marine water)	140.9 mg/L (.)
PNEC STP	2251 mg/L (.)
PNEC soil	28 mg/kg soil dw (.)
PNEC sediment (freshwater)	552 mg/kg sedim. dw (.)
PNEC sediment (marine water)	552 mg/kg sedim. dw (.)
PNEC aqua (intermittent releases)	140.9 mg/L (.)
PNEC oral	160 mg/kg food (.)

**5989-27-5 D-limonene**

PNEC aqua (freshwater)	0.00054 mg/L (.)
PNEC aqua (marine water)	0.00054 mg/L (.)
PNEC STP	1.8 mg/L (.)
PNEC soil	0.262 mg/kg soil dw (.)
PNEC sediment (freshwater)	1.32 mg/kg sedim. dw (.)
PNEC sediment (marine water)	0.13 mg/kg sedim. dw (.)
PNEC oral	3.33 mg/kg food (.)

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

Do not eat, drink or smoke while working.  
 Wash hands during breaks and at the end of the work.  
 Do not inhale gases / fumes / aerosols.

· **Breathing equipment:**

Not necessary if room is well-ventilated.  
 Use breathing protection in case of insufficient ventilation.  
 Filter AX.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

Nitrile rubber, NBR  
 Butyl rubber, BR  
 Fluorocarbon rubber (Viton)

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· **Eye protection:**



Tightly sealed safety glasses.

· **Body protection:**

Wear antistatic clothing made from natural fibres (cotton) or heat-resistant synthetic fibres.

· **Limitation and supervision of exposure into the environment**

Avoid the uncontrolled release into the environment.

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Aerosol
· <b>Colour:</b>	Colourless
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **Change in condition**

**Initial boiling point and boiling range:** Not applicable, as aerosol

· **Flash point:** ca. -80 °C

· **Explosive properties:** Not determined.

· **Critical values for explosion:**

· <b>Lower:</b>	1.8 Vol %
· <b>Upper:</b>	10.8 Vol %

· **Density** 0.786 g/cm<sup>3</sup>

· **Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix

· **Solvent content:**

· **Organic solvents:**

· <b>VOC EU</b>	752.5 g/l
· <b>VOC EU</b>	96.79 %

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

Avoid direct sunlight, heat and ignition sources.

· **10.3 Possibility of hazardous reactions**

Danger of containers bursting because of high vapour pressure

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** Strong oxidizing agents

· **10.6 Hazardous decomposition products:**

None in case of intended use and storage in compliance with instructions.

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### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values that are relevant for classification:**

**67-63-0 propan-2-ol**

Oral	LD50	4570 mg/kg (rat)
Dermal	LD50	13400 mg/kg (rab)
Inhalative	LC50	30 mg/l/4h (rat)

**5989-27-5 D-limonene**

Oral	LD50	> 4800 mg/kg (rat) > 5000 mg/kg (rabbit) (OECD 402)
Dermal	LD50	> 5000 mg/kg (rabbit) (OECD 402)

- **Primary irritant effect:**

- **Skin corrosion/irritation**

Causes skin irritation.

- **Serious eye damage/irritation**

Causes serious eye irritation.

- **Respiratory or skin sensitisation**

May cause an allergic skin reaction.

- **Repeated dose toxicity**

**5989-27-5 D-limonene**

Oral	NOAEL (90d)	100 mg/kg bw/day (dog) (OECD 409)
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- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**67-63-0 propan-2-ol**

Oral	NOAEL	400 mg/kg bw/day (human)
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- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

- **Carcinogenicity** Based on available data, the classification criteria are not met.

- **Reproductive toxicity** Based on available data, the classification criteria are not met.

- **STOT-single exposure**

May cause drowsiness or dizziness.

- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard**

May be fatal if swallowed and enters airways.

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**67-63-0 propan-2-ol**

EC50 (static)	>10000 mg/l/24h (Daphnia magna) (OECD202)
LC50 (dynamic)	9640 mg/l/96h (Pimephales promelas) (OECD203)

**5989-27-5 D-limonene**

EC50 (static)	0.85 mg/l/48h (Daphnia magna) (OECD 202)
LC50 (dynamic)	0.72 mg/l/96h (Pimephales promelas) (OECD 203)
EC50 (static)	150 mg/l/72h (Desmodemus subspicatus) (OECD 201)

- **12.2 Persistence and degradability** No further relevant information available.

- **Other information:** There are no data available about the preparation.

- **12.3 Bioaccumulative potential** No further relevant information available.

- **12.4 Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water bodies or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Proceed according to local, official regulations.  
The waste code numbers mentioned are recommendations based on the probable use of the product.

- **European waste catalogue**

16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 05 00	gases in pressure containers and discarded chemicals
16 05 04*	gases in pressure containers (including halons) containing hazardous substances
14 00 00	WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08)
14 06 00	waste organic solvents, refrigerants and foam/aerosol propellants
14 06 03*	other solvents and solvent mixtures

- **Uncleaned packagings:**
- **Recommendation:**  
After use the packaging shall be discharged completely.  
Dispose of packaging according to regulations on the disposal of packagings.

### SECTION 14: Transport information

- **14.1 UN-Number**
- **ADR, IMDG, IATA** UN1950
- **14.2 UN proper shipping name**
- **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
- **IMDG** AEROSOLS, MARINE POLLUTANT
- **IATA** Aerosols, flammable

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 2.1 5F
- **Label** 3

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· **IMDG**

· **Class** 2.1  
· **Label** 3

· **IATA**

· **Class** 2.1  
· **Label** 3

· **14.4 Packing group**  
· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**

· **Marine pollutant:** Symbol (fish and tree)  
· **Special marking (ADR):** Symbol (fish and tree)

· **14.6 Special precautions for user**

· **EMS Number:** F-D,S-U  
· **Stowage Code** SW1 Protected from sources of heat.  
SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.  
SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

· **Segregation Code**

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**  
· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity

· **UN "Model Regulation":** UN 1950 AEROSOLS, 3, ENVIRONMENTALLY HAZARDOUS

### SECTION 15: Regulatory information

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

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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**Hazard pictograms**


GHS02 GHS07 GHS09

**Signal word** Danger

**Hazard-determining components of labelling:**

D-limonene  
Solvent naphtha (petroleum), light aliph.  
propan-2-ol

**Hazard statements**

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H317 May cause an allergic skin reaction.  
H336 May cause drowsiness or dizziness.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P102 Keep out of reach of children.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
  
P251 Do not pierce or burn, even after use.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
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. Remove contact lenses, if present and easy to do. Continue rinsing.  
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**Directive 2012/18/EU**

**Named dangerous substances - ANNEX I** None of the ingredients is listed.

**Seveso category**

P3a FLAMMABLE AEROSOLS  
E2 Hazardous to the Aquatic Environment

**Qualifying quantity (tonnes) for the application of lower-tier requirements** 150 t

**Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

**REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

**National regulations**

**Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

**Substances of very high concern (SVHC) according to REACH, Article 57**

None of the ingredients is contained.

**15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**Relevant phrases**

H220 Extremely flammable gas.  
H225 Highly flammable liquid and vapour.  
H226 Flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.

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H317 May cause an allergic skin reaction.  
 H319 Causes serious eye irritation.  
 H336 May cause drowsiness or dizziness.  
 H400 Very toxic to aquatic life.  
 H410 Very toxic to aquatic life with long lasting effects.  
 H411 Toxic to aquatic life with long lasting effects.

· **Department issuing data specification sheet:**

This Material Safety Data Sheet has been drawn up in cooperation with:  
 DEKRA Assurance Services GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,  
 phone: (+49) 511 42079 - 0, reach@dekra.com.  
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 by DEKRA Assurance Services GmbH.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Concentration (REACH)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 SVHC: Substances of Very High Concern  
 vPvB: very Persistent and very Bioaccumulative  
 Flam. Gas 1: Flammable gases – Category 1  
 Aerosol 1: Aerosols – Category 1  
 Press. Gas C: Gases under pressure – Compressed gas  
 Press. Gas L: Gases under pressure – Liquefied gas  
 Flam. Liq. 2: Flammable liquids – Category 2  
 Flam. Liq. 3: Flammable liquids – Category 3  
 Skin Irrit. 2: Skin corrosion/irritation – Category 2  
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2  
 Skin Sens. 1: Skin sensitisation – Category 1  
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3  
 Asp. Tox. 1: Aspiration hazard – Category 1  
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

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