

# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Supersedes version of: 3/15/2019 Issue date: 12/14/2022 Revision date: 12/14/2022

Version: 25.0

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

#### 1.1. Product identifier

Product form Mixture Name GC 22

UFI W00P-0A5U-RV25-4RY0 Product code **BU Direct Fastening** 

Vaporizer Container fitted with a sealed spray attachment



#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

Use of the substance/mixture Propellant for direct fastening tools.

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti Deutschland AG Hilti Entwicklungsgesellschaft mbH

Hiltistr. 2 Hiltistrasse 6

DE-86916 Kaufering DE-86916 Kaufering

Deutschland Deutschland

T +49 8191 90-0 - F +49 8191 90-1122 T +49 8191 906310 - F +49 8191 90176310

de.kundenservice@hilti.com df-hse@hilti.com

#### 1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

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

Flammable gases, Category 1A H220 Gases under pressure : Compressed gas H280

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

#### Adverse physicochemical, human health and environmental effects

No additional information available

#### 2.2. Label elements

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

Hazard pictograms (CLP)

GHS02

Signal word (CLP)

Danger

Hazard statements (CLP) H220 - Extremely flammable gas.

H280 - Contains gas under pressure; may explode if heated.



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Precautionary statements (CLP) P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.

P381 - In case of leakage, eliminate all ignition sources.

P403 - Store in a well-ventilated place.

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### 2.3. Other hazards

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
Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component           |  |
|---------------------|--|
| isobutane (75-28-5) | 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 |
| propene (115-07-1)  | 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 |
| propane (74-98-6)   | 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 |

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 %

| Component          |   |
|--------------------|---|
| isobutane(75-28-5) | The substance is not 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 |
| propene(115-07-1)  | The substance is not 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 |
| propane(74-98-6)   | The substance is not 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 |

# **SECTION 3: Composition/information on ingredients**

## 3.1. Substances

Not applicable

#### 3.2. Mixtures

| J.Z. MIXLUIGS |   |          |   |
|---------------|---|----------|---|
| Name          | Product identifier  |          | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
| isobutane     | CAS-No.: 75-28-5<br>EC-No.: 200-857-2<br>EC Index-No.: 601-004-00-0<br>REACH-no: 01-2119485395-<br>27 | 55 - <65 | Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280                  |



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| Name    | Product identifier  | %        | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---------|---|----------|---|
| propene | CAS-No.: 115-07-1<br>EC-No.: 204-062-1<br>EC Index-No.: 601-011-00-9                                  | 20 - <30 | Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280                  |
| propane | CAS-No.: 74-98-6<br>EC-No.: 200-827-9<br>EC Index-No.: 601-003-00-5<br>REACH-no: 01-2119486944-<br>21 | 5 - <15  | Flam. Gas 1A, H220<br>Press. Gas (Liq.), H280                   |

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 general Take off immediately all contaminated clothing.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Gently wash with plenty of soap and water.

First-aid measures after eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

First-aid measures after ingestion Immediately consult a doctor/medical service.

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

No additional information available

#### 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 Carbon dioxide. Water spray. Dry powder. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a heavy water stream.

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

Explosion hazard Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries.

Hazardous decomposition products in case of fire On burning: release of (highly) toxic gases/vapours. Thermal decomposition generates :

Carbon dioxide. Carbon monoxide.

### 5.3. Advice for firefighters

Precautionary measures fire Fight fire remotely due to the risk of explosion.

Firefighting instructions DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

Other information EN 12942. EN 12941.

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

## 6.1. Personal precautions, protective equipment and emergency procedures

General measures Evacuate area. Remove ignition sources.

#### 6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Evacuate area. No open flames, no sparks, and no smoking.



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#### 6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. Breathing apparatus.

#### 6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up Do not flush with water.

#### 6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Additional hazards when processed Flammable gas. Do not pierce or burn, even after use. Keep away from heat, hot surfaces,

sparks, open flames and other ignition sources. No smoking.

Precautions for safe handling Do not spray on an open flame or other ignition source. Avoid contact with skin, eyes and

clothing. Do not breathe vapours. Prevent the build-up of electrostatic charge.

Hygiene measures 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

Technical measures Proper grounding procedures to avoid static electricity should be followed.

Storage conditions Keep cool. Protect from sunlight. Keep in fireproof place. Store in dry protected location to

prevent any moisture contact.

Incompatible materials Heat sources. Direct sunlight. Sources of ignition.

Storage temperature  $5-25\,^{\circ}\text{C}$ 

Heat and ignition sources Keep away from heat and direct sunlight. Keep away from ignition sources.

Information on mixed storage Do not store with DX powder cartridges.

### 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

| isobutane (75-28-5)                               |            |
|---|------------|
| Germany - Occupational Exposure Limits (TRGS 900) |            |
| Local name  | Isobutan   |
| AGW (OEL TWA) [1]                                 | 2400 mg/m³ |
| AGW (OEL TWA) [2]                                 | 1000 ppm   |
| Peak exposure limitation factor                   | 4(II)      |
| Remark  | DFG        |
| Regulatory reference                              | TRGS900    |
| propane (74-98-6)                                 |            |
| Germany - Occupational Exposure Limits (TRGS 900) |            |
| Local name  | Propan     |
| AGW (OEL TWA) [1]                                 | 1800 mg/m³ |



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| propane (74-98-6)               |         |
|---------------------------------|---------|
| AGW (OEL TWA) [2] 1000 ppm      |         |
| Peak exposure limitation factor | 4(II)   |
| Remark                          | DFG     |
| Regulatory reference            | TRGS900 |

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 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:

Chemical goggles or safety glasses. EN 166. EN 170

### 8.2.2.2. Skin protection

#### Skin and body protection:

When using cartridge operated tools, sufficient ear protection must be worn.

#### Hand protection:

In case of repeated or prolonged contact wear gloves

| Hand protection   |                      |                  |                |             |            |
|-------------------|----------------------|------------------|----------------|-------------|------------|
| Туре              | Material             | Permeation       | Thickness (mm) | Penetration | Standard   |
| Disposable gloves | Nitrile rubber (NBR) | 3 (> 60 minutes) | 0,12           |             | EN ISO 374 |

## 8.2.2.3. Respiratory protection

### Respiratory protection:

No respiratory protection needed under normal use conditions

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

No additional information available



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No additional information available

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

#### 9.1. Information on basic physical and chemical properties

Physical state Gas
Colour Colourless.
Odour Sweet.
Odour threshold Not available
Melting point Not applicable
Freezing point Not applicable
Boiling point Not available

Flammability Extremely flammable aerosol.

Explosive properties Product is not explosive. In use, may form flammable/explosive vapour-air mixture.

Lower explosion limit 1.7 vol % Upper explosion limit 11.1 vol % Flash point Not applicable Auto-ignition temperature Not available Decomposition temperature Not available рΗ Not applicable Not applicable Viscosity, kinematic Solubility insoluble in water. Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure 8300 hPa Vapour pressure at 50°C Not available

Density 0.6 g/cm³ (DIN 51757)

Relative density

Relative vapour density at 20°C

Not available

Particle characteristics

Not applicable

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

## 9.2.2. Other safety characteristics

Gas group Gases under pressure : Compressed gas

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

## 10.3. Possibility of hazardous reactions

No additional information available

## 10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Overheating.

## 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

No additional information available



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## **SECTION 11: Toxicological information**

| 11.1. Information on hazard classes as defined   | d in Regulation (EC) No 1272/2008   |  |
|--|---|--|
| Acute toxicity (oral)  | Not classified (Based on available data, the classification criteria are not met)   |  |
| Acute toxicity (dermal)  | Not classified (Based on available data, the classification criteria are not met)   |  |
| Acute toxicity (inhalation)  | Not classified (Based on available data, the classification criteria are not met)   |  |
| isobutane (75-28-5)  |   |  |
| LC50 Inhalation - Rat [ppm]  | > 18000 ppm   |  |
| propene (115-07-1)   |   |  |
| LC50 Inhalation - Rat  | > 688 mg/m³   |  |
|  |   |  |
| propane (74-98-6)  |   |  |
| propane (74-98-6) LC50 Inhalation - Rat [ppm]  | > 280000 ppm (literature)   |  |
| ,  | > 280000 ppm (literature)  Not classified (Based on available data, the classification criteria are not met)  |  |
| LC50 Inhalation - Rat [ppm]  |   |  |
| LC50 Inhalation - Rat [ppm] Skin corrosion/irritation  | Not classified (Based on available data, the classification criteria are not met)   |  |
| LC50 Inhalation - Rat [ppm]  Skin corrosion/irritation Serious eye damage/irritation   | Not classified (Based on available data, the classification criteria are not met)  Not classified (Based on available data, the classification criteria are not met)  |  |
| LC50 Inhalation - Rat [ppm]  Skin corrosion/irritation Serious eye damage/irritation Respiratory or skin sensitisation                           | Not classified (Based on available data, the classification criteria are not met)  Not classified (Based on available data, the classification criteria are not met)  Not classified (Based on available data, the classification criteria are not met)   |  |
| LC50 Inhalation - Rat [ppm]  Skin corrosion/irritation  Serious eye damage/irritation  Respiratory or skin sensitisation  Germ cell mutagenicity | Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) |  |

## 11.2. Information on other hazards

## 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

No additional information available

Container fitted with a sealed spray attachment

#### 11.2.2. Other information

ErC50 algae

STOT-repeated exposure

Aspiration hazard

GC 22 Vaporizer

Potential adverse human health effects and symptoms

No additional information available,No harmful effects are to be expected if used properly. The contained ingredients can be harmful, but they are hermetically enclosed in the article

7.71 - 16.5 mg/l (Quantitative structure-activity relationship (QSAR))

Not classified (Based on available data, the classification criteria are not met)

Not classified (Based on available data, the classification criteria are not met)

and can not be released.

The dismantling of the article is prohibited.

# **SECTION 12: Ecological information**

| 12.1. Toxicity   |   |
|--|---|
| Hazardous to the aquatic environment, short–term (acute) | Not classified (Based on available data, the classification criteria are not met) |
| Hazardous to the aquatic environment, long-term          | Not classified (Based on available data, the classification criteria are not met) |
| (chronic)  |   |
| isobutane (75-28-5)                                      |   |
| LC50 - Fish [1]  | 24.11 – 147.54 mg/l (Quantitative structure-activity relationship (QSAR))         |
| EC50 - Crustacea [1]                                     | 7.02 – 69.43 mg/l (Quantitative structure-activity relationship (QSAR))           |



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| propene (115-07-1)   |  |
|----------------------|--|
| LC50 - Fish [1]      | 43.3 mg/l (72 h; Oncorhynchus mykiss (Rainbow trout); Quantitative structure-activity relationship (QSAR)) |
| EC50 - Crustacea [1] | 28.2 mg/l (48 h; daphnia; Quantitative structure-activity relationship (QSAR))                             |
| EC50 96h - Algae [1] | 12.1 mg/l (algae; Quantitative structure-activity relationship (QSAR))                                     |

## 12.2. Persistence and degradability

| isobutane (75-28-5)           |                                 |  |
|-------------------------------|---------------------------------|--|
| Persistence and degradability | Readily biodegradable.          |  |
| propene (115-07-1)            |                                 |  |
| Persistence and degradability | Readily biodegradable in water. |  |
| propane (74-98-6)             |                                 |  |
| Persistence and degradability | Readily biodegradable in water. |  |

## 12.3. Bioaccumulative potential

| isobutane (75-28-5)                             |  |  |
|---|--|--|
| Partition coefficient n-octanol/water (Log Pow) | 1.09 – 2.8 (20 °C)                           |  |
| Bioaccumulative potential                       | Bioaccumulation unlikely.                    |  |
| propene (115-07-1)                              |  |  |
| Partition coefficient n-octanol/water (Log Kow) | 1.77 (20 °C)                                 |  |
| Bioaccumulative potential                       | Low bioaccumulation potential (Log Kow < 4). |  |
| propane (74-98-6)                               |  |  |
| Bioaccumulative potential                       | Low bioaccumulation potential (Log Kow < 4). |  |

## 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

#### GC 22

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

## 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information

Avoid release to the environment.

# **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

Regional legislation (waste)

Waste treatment methods

Product/Packaging disposal recommendations

Additional information

Disposal must be done according to official regulations.

Dispose of contents/container in accordance with licensed collector's sorting instructions.

Container under pressure. Do not drill or burn even after use.

Flammable vapours may accumulate in the container.



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European List of Waste (LoW) code 14 06 03\* - other solvents and solvent mixtures

16 05 04\* - gases in pressure containers (including halons) containing dangerous

substances

# **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID

| ADR   | IMDG   | IATA      | RID  |
|---|--|-----------|--|
| 14.1. UN number or ID number  |  |           |  |
| UN 2037   | UN 2037  | Forbidden | UN 2037  |
| 14.2. UN proper shipping name   |  |           |  |
| RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES)                   | RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES)              | Forbidden | RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES)              |
| Transport document description  |  |           |  |
| UN 2037 RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES), 2.1, (D) | UN 2037 RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES), 2.1 | Forbidden | UN 2037 RECEPTACLES, SMALL,<br>CONTAINING GAS (GAS<br>CARTRIDGES), 2.1 |
| 14.3. Transport hazard class(es)  |  |           |  |
| 2.1   | 2.1  | Forbidden | 2.1  |
| 2   | 2  | Forbidden | 2  |
| 14.4. Packing group   |  |           | ,  |
| Not applicable  | Not applicable   | Forbidden | Not applicable   |
| 14.5. Environmental hazards   |  |           |  |
| Dangerous for the environment: No   | Dangerous for the environment: No<br>Marine pollutant: No              | Forbidden | Dangerous for the environment: No                                      |
| No supplementary information availa   | able   |           |  |

# 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) 5F

Special provisions (ADR) 191, 303, 344

Limited quantities (ADR)

Excepted quantities (ADR)

Packing instructions (ADR)

Special packing provisions (ADR)

Mixed packing provisions (ADR)

Transport category (ADR)

11

E0

P003

PP17, RR6

MP9

Transport category (ADR)

2

Special provisions for carriage - Loading, unloading CV9, CV12

and handling (ADR)

Special provisions for carriage - Operation (ADR) S2
Tunnel restriction code (ADR) D

Transport by sea

Special provisions (IMDG) 191, 277, 303, 344



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Limited quantities (IMDG) SP277

Excepted quantities (IMDG) E0

Packing instructions (IMDG) P003

Special packing provisions (IMDG) PP17

EmS-No. (Fire) F-D

EmS-No. (Spillage) S-U

Stowage category (IMDG) B

Properties and observations (IMDG) Normally contain mixtures of liquefied Butane and Propane in various proportions for use in

camping stoves, etc.

MFAG-No 115

#### Air transport

Forbidden

Rail transport

Classification code (RID) 5F

Special provisions (RID) 191, 303, 344

Limited quantities (RID) 1L

Excepted quantities (RID) E0

Packing instructions (RID) P003

Special packing provisions (RID) PP17, RR6

Mixed packing provisions (RID) MP9

Transport category (RID) 2

Special provisions for carriage - Loading, unloading

and handling (RID)

Colis express (express parcels) (RID) CE2 Hazard identification number (RID) 23

## 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

CW9, CW12

## 15.1.1. EU-Regulations

## **REACH Annex XVII (Restriction List)**

| EU restriction list (REACH Annex XVII) |                                  |  |  |
|--|----------------------------------|--|--|
| Reference code                         | Applicable on                    | Entry title or description   |  |
| 40.                                    | isobutane ; propene ;<br>propane | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not. |  |

## **REACH Annex XIV (Authorisation List)**

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### **REACH Candidate List (SVHC)**

Contains no substance(s) listed on the REACH Candidate List

## PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### **POP Regulation (Persistent Organic Pollutants)**

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)



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#### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

#### Seveso Directive (Disaster Risk Reduction)

| Seveso III Part I (Categories of dangerous substances) | Qualifying quantity (tonnes) |            |
|--|------------------------------|------------|
|  | Lower-tier                   | Upper-tier |
| P2 FLAMMABLE GASES                                     | 10                           | 50         |
| Flammable gases, Category 1 or 2                       |                              |            |

## Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 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 the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

#### Germany

Water hazard class (WGK) Storage class (LGK, TRGS 510) Hazardous Incident Ordinance (12. BImSchV) WGK nwg, Non-hazardous to water (Classification according to AwSV, Annex 1).

LGK 2A - Gases (except aerosol dispensers and lighters).

Listed in the 12. BlmSchV (Annex I) under: 1.2.2

- Quantity threshold for operational area under § 1 para. 1

- Sentence 1 :10000 kg - Sentence 2 :50000 kg

### 15.2. Chemical safety assessment

No additional information available

## **SECTION 16: Other information**

| Indication of changes |  |          |  |
|-----------------------|--|----------|--|
| Section               | Changed item   | Change   | Comments   |
|                       | General  | Modified | SDS EU format according to COMMISSION REGULATION (EU) 2020/878 |
|                       |  |          |  |
| 1                     | UFI  | Added    |  |
| 1.2                   | Use of the substance/mixture                               | Modified |  |
| 2.2                   | Labelling according to Regulation (EC) No. 1272/2008 [CLP] | Modified |  |
| 8.2                   | Personal protective equipment                              | Modified |  |
| 9                     | Physical and chemical properties                           | Modified |  |
| 11                    | Toxicological information                                  | Modified |  |
| 12.                   | Ecotoxicological information                               | Modified |  |
| 15                    | Regulatory information                                     | Added    |  |



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| Abbreviations an | d acronyms:   |
|------------------|---|
| CAS-No.          | Chemical Abstract Service number  |
| 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   |
| CLP              | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008                       |
| DNEL             | Derived-No Effect Level   |
| EC50             | Median effective concentration  |
| ED               | Endocrine disrupting properties   |
| EC-No.           | European Community number   |
| EN               | European Standard   |
| IATA             | International Air Transport Association   |
| IMDG             | International Maritime Dangerous Goods  |
| IOELV            | Indicative Occupational Exposure Limit Value  |
| LC50             | Median lethal concentration   |
| LD50             | Median lethal dose  |
| NOEC             | No-Observed Effect Concentration  |
| OECD             | Organisation for Economic Co-operation and Development  |
| N.O.S.           | Not Otherwise Specified   |
| OEL              | Occupational Exposure Limit   |
| PBT              | Persistent Bioaccumulative Toxic  |
| PNEC             | Predicted No-Effect Concentration   |
| REACH            | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| RID              | Regulations concerning the International Carriage of Dangerous Goods by Rail                      |
| SDS              | Safety Data Sheet   |
| STP              | Sewage treatment plant  |
| TLM              | Median Tolerance Limit  |
| TRGS             | Technical Rules for Hazardous Substances  |
| VOC              | Volatile Organic Compounds  |
| WGK              | Water Hazard Class  |
| vPvB             | Very Persistent and Very Bioaccumulative  |
| NOAEL            | No-Observed Adverse Effect Level  |
| NOAEC            | No-Observed Adverse Effect Concentration  |
| LOAEL            | Lowest Observed Adverse Effect Level  |
|                  |   |

Data sources Training advice Source: European Chemicals Agency, http://echa.europa.eu/. manufacturer. Department issuing data specification sheet.



# Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| Full text of H- and EUH-statements: |   |  |
|-------------------------------------|---|--|
| Flam. Gas 1A                        | Flammable gases, Category 1A                        |  |
| H220                                | Extremely flammable gas.                            |  |
| H280                                | Contains gas under pressure; may explode if heated. |  |
| Press. Gas (Comp.)                  | Gases under pressure : Compressed gas               |  |
| Press. Gas (Liq.)                   | Gases under pressure : Liquefied gas                |  |

## SDS EU Hilti

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.