

according to the United Nations GHS (Rev. 4, 2011) Date of issue: 23/02/2018

Version: 2.2

Revision date: 23/02/2018

Supersedes: 13/10/2017

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

| 1.1. Product identifier |                     |
|-------------------------|---------------------|
| Product form            | Mixture             |
| Product name            | GC 32               |
| UN-No. (ADR)            | 3150                |
| Product code            | BU Direct Fastening |
|                         |                     |

## 1.2. Relevant identified uses of the substance or mixture and 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 Distribution Ltd.                 | Hilti Entwicklungsgesellschaft mbH                                |
| JSC "Hilti Distribution Ltd"            | Hiltistrasse 6  |
| Chimki, Leningradskoye Hwy 25           | 86916 Kaufering - Deutschland                                     |
| 141402 Moscow region - Russia           | T +49 8191 906310 - F +49 8191 90176310                           |
| T +7 495 792 52 52 - F +7 495 792 52 53 | <u>df-hse@hilti.com</u>   |
| 1.4. Emergency telephone number         |   |
| Emergency number                        | Schweizerisches Toxikologisches Informationszentrum – 24h Service |
|   | +41 44 251 51 51 (international)                                  |
|   | +7 495 792 52 52  |

# **SECTION 2: Hazards identification**

### 2.1. Classification of the substance or mixture

| Classification according to the United Nations GHS (Rev. 4, 2011) |      |  |
|---|------|--|
| Pyr. Gas Not classified   |      |  |
| Flam. Gas 1   | H220 |  |
| Press. Gas (Comp.)  | H280 |  |
| Aquatic Acute 3   | H402 |  |
| Full text of hazard classes and H-statements : see section 16     |      |  |

### 2.2. Label elements

| Labelling according to the United Nations<br>Hazard pictograms (GHS-UN) | GHS (Rev. 4, 2011)  |
|---|---|
| Signal word (GHS-UN)  | Danger  |
| Hazard statements (GHS-UN)  | H220 - Extremely flammable gas.<br>H280 - Contains gas under pressure; may explode if heated.<br>H402 - Harmful to aquatic life   |
| Precautionary statements (GHS-UN)                                       | <ul> <li>P251 - Do not pierce or burn, even after use.</li> <li>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. heat, hot surfaces, open flames, sparks</li> <li>P211 - Do not spray on an open flame or other ignition source.</li> <li>P381 - Eliminate all ignition sources if safe to do so.</li> </ul> |
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according to the United Nations GHS (Rev. 4, 2011)

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P403 - Store in a well-ventilated place.

### 2.3. Other hazards

No additional information available

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

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

| Name                | Product identifier   | %        | Classification according to the<br>United Nations GHS   |
|---------------------|----------------------|----------|---|
| but-1-ene           | (CAS-No.) 106-98-9   | 45 - <55 | Flam. Gas 1, H220<br>Press. Gas (Comp.), H280<br>Aquatic Acute 3, H402  |
| propene             | (CAS-No.) 115-07-1   | 35 - <45 | Flam. Gas 1, H220<br>Press. Gas (Comp.), H280   |
| Propane             | (CAS-No.) 74-98-6    | 5 - 10   | Flam. Gas 1, H220<br>Press. Gas (Comp.), H280   |
| polyethylene glycol | (CAS-No.) 25322-68-3 | 1 - 2.5  | Flam. Liq. Not classified<br>Acute Tox. Not classified (Oral)<br>Acute Tox. Not classified (Dermal)<br>Aquatic Acute Not classified |

Full text of H-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<br>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

Most Important Symptoms/Effects

No additional information available.

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

No additional information available.

# SECTION 5: Firefighting measures

## 5.1. Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media Carbon dioxide. Alcohol-resistant foam. Water spray. Dry powder. Do not use a heavy water stream.



according to the United Nations GHS (Rev. 4, 2011)

| 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.                   |  |
| 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.        |  |  |
| 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.

| SECTION 7: Handling and stor            | age   |
|---|---|
| 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, inclu | Iding 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 °C   |

Do not store with DX powder cartridges.

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

Storage temperature Heat and ignition sources Information on mixed storage

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available



according to the United Nations GHS (Rev. 4, 2011)

# 8.2. Appropriate engineering controls

Appropriate engineering controls

Hand protection

Ensure good ventilation of the work station.

### 8.3. Individual protection measures, such as personal protective equipment (PPE)

In case of repeated or prolonged contact wear gloves

| Туре  | Material                | Permeation       | Thickness (mm) | Penetratio<br>n | Standard |
|---|-------------------------|------------------|----------------|-----------------|----------|
| Disposable gloves                                     | Nitrile rubber<br>(NBR) | 3 (> 60 minutes) | 0,12           |                 | EN 374   |
| Eye protection     Chemical goggles or safety glasses |                         |                  |                |                 |          |
| Туре  | Use                     | Characteristics  | Standard       |                 |          |
| Safety glasses  |                         | clear            | EN 166, EN 170 |                 |          |

Skin and body protection

When using setting tools, sufficient ear protection must be worn.



### 8.4. Exposure limit values for the other components

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                                      | characteristic.        |
| Odour threshold                            | No data available      |
| рН   | No data available      |
| Relative evaporation rate (butylacetate=1) | No data available      |
| Melting point                              | No data available      |
| Freezing point                             | No data available      |
| Boiling point                              | No data available      |
| Flash point                                | No data available      |
| Auto-ignition temperature                  | 440                    |
| Decomposition temperature                  | No data available      |
| Flammability (solid, gas)                  | No data available      |
| Vapour pressure                            | 1800 hPa 20°C          |
| Relative vapour density at 20 °C           | No data available      |
| Relative density                           | No data available      |
| Density                                    | 0.71 g/cm3 (DIN 51757) |
| Solubility                                 | insoluble in water.    |
| Log Pow                                    | No data available      |
| Viscosity, kinematic                       | No data available      |
| Viscosity, dynamic                         | No data available      |
|  |                        |



according to the United Nations GHS (Rev. 4, 2011)

| Explosive properties | Product is not explosive. In use, may form flammable/explosive vapour-air mixture. |
|----------------------|--|
| Oxidising properties | No data available  |
| Explosive limits     | 1.6 vol %<br>11.1 vol %  |

## 9.2. Other information

Compressed gas

| SECTION 10: Stability and reactivit | y |
|-------------------------------------|---|
|-------------------------------------|---|

### 10.1. Reactivity

Gas group

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

# **SECTION 11: Toxicological information**

## 11.1. Information on toxicological effects

| Acute toxicity (oral)             | Not classified   |
|-----------------------------------|------------------|
| Acute toxicity (dermal)           | Not classified   |
| Acute toxicity (inhalation)       | Not classified   |
| Skin corrosion/irritation         | Not classified   |
| Serious eye damage/irritation     | Not classified   |
| Respiratory or skin sensitisation | Not classified   |
| Germ cell mutagenicity            | Not classified   |
| Carcinogenicity                   | Not classified   |
| Reproductive toxicity             | Not classified   |
| STOT-single exposure              | Not classified   |
| STOT-repeated exposure            | Not classified   |
| Aspiration hazard                 | Not classified   |
| GC 32                             |                  |
| Vaporizer                         | Container fitted |

Container fitted with a sealed spray attachment



according to the United Nations GHS (Rev. 4, 2011)

| SECTION 12: Ecological information                        |                          |  |  |
|---|--------------------------|--|--|
| SECTION 12. Ecological Informatio                         |                          |  |  |
| 12.1. Toxicity  |                          |  |  |
| Acute aquatic toxicity                                    | Harmful to aquatic life. |  |  |
| Chronic aquatic toxicity                                  | Not classified           |  |  |
| 12.2. Persistence and degradability                       |                          |  |  |
| No additional information available                       |                          |  |  |
| 12.3. Bioaccumulative potential                           |                          |  |  |
| No additional information available                       |                          |  |  |
| 12.4. Mobility in soil                                    |                          |  |  |
| No additional information available                       |                          |  |  |
| 12.5. Other adverse effects                               |                          |  |  |
| Ozone   | Not classified           |  |  |
| Other adverse effects No additional information available |                          |  |  |

| 13.1. Waste treatment methods   |  |  |  |
|---|--|--|--|
| 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.  |  |  |  |
|   |  |  |  |

# **SECTION 14: Transport information**

**SECTION 13: Disposal considerations** 

# In accordance with ADR / RID / IMDG / IATA / ADN

| ADR   | IMDG   | ΙΑΤΑ   | RID  |
|---|--|--|--|
| 14.1. UN number   |  |  |  |
| 3150  | 3150   | 3150   | 3150   |
| 14.2. UN proper shipping nam                                      | e  |  | ·  |
| HYDROCARBON GAS REFILLS<br>FOR SMALL DEVICES                      | HYDROCARBON GAS REFILLS<br>FOR SMALL DEVICES                 | HYDROCARBON GAS REFILLS<br>FOR SMALL DEVICES | HYDROCARBON GAS REFILLS<br>FOR SMALL DEVICES |
| Transport document descript                                       | ion  |  |  |
| UN 3150 HYDROCARBON GAS<br>REFILLS FOR SMALL DEVICES,<br>2.1, (D) | UN 3150 HYDROCARBON GAS<br>REFILLS FOR SMALL DEVICES,<br>2.1 |  |  |
| 14.3. Transport hazard class(                                     | es)  |  |  |
| 2.1   | 2.1  | 2.1  | 2.1  |
| 2   |  |  |  |



according to the United Nations GHS (Rev. 4, 2011)

| ADR                                    | IMDG                            | ΙΑΤΑ                            | RID                             |
|--|---------------------------------|---------------------------------|---------------------------------|
| 14.4. Packing group                    |                                 |                                 |                                 |
| Not applicable                         | Not applicable                  | Not applicable                  | Not applicable                  |
|  |                                 |                                 |                                 |
| 14.5. Environmental hazards            |                                 |                                 |                                 |
| Dangerous for the environment :        | Dangerous for the environment : | Dangerous for the environment : | Dangerous for the environment : |
| No                                     | No<br>Marine pollutant : No     | No                              | No                              |
| No supplementary information available |                                 |                                 |                                 |

## 14.6. Special precautions for user

| - Overland transport            |      |
|---------------------------------|------|
| Classification code (ADR)       | 6F   |
| Limited quantities (ADR)        | 0    |
| Packing instructions (ADR)      | P209 |
| Mixed packing provisions (ADR)  | MP9  |
| Tunnel restriction code (ADR)   | D    |
| - Transport by sea              |      |
| Limited quantities (IMDG)       | 0    |
| Packing instructions (IMDG)     | P003 |
| EmS-No. (Fire)                  | F-D  |
| EmS-No. (Spillage)              | S-U  |
| Stowage category (IMDG)         | В    |
| MFAG-No                         | 115  |
| - Air transport                 |      |
| PCA packing instructions (IATA) | 201  |
| PCA max net quantity (IATA)     | 1kg  |
| CAO packing instructions (IATA) | 201  |
| - Rail transport                |      |
| Limited quantities (RID)        | 0    |
| Packing instructions (RID)      | P209 |
| Carriage prohibited (RID)       | No   |
|                                 |      |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

# **SECTION 15: Regulatory information**

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

No additional information available

# **SECTION 16: Other information**

| SDS Major/Minor | None       |
|-----------------|------------|
| Date of issue   | 23/02/2018 |
| Revision date   | 23/02/2018 |



according to the United Nations GHS (Rev. 4, 2011)

#### Supersedes

13/10/2017

### Indication of changes:

| S | Section | Changed item                              | Change   | Comments |
|---|---------|---|----------|----------|
| 2 | 2.1     | Classification (GHS-UN)                   | Modified |          |
| 2 | 2.2     | Hazard statements (GHS-UN)                | Modified |          |
| 3 | 3       | Composition/information on<br>ingredients | Modified |          |

## Full text of H-statements:

| H220 | Extremely flammable gas.                            |
|------|---|
| H280 | Contains gas under pressure; may explode if heated. |
| H402 | Harmful to aquatic life                             |

### SDS\_UN\_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