

# GC 32

## Safety Data Sheet

according to the Hazardous Substance SDS Notice 2017 (EPA)

Issue date: 27/06/2023

Revision date: 27/06/2023

Supersedes: 20/03/2018

Version: 3.0

### SECTION 1: Identification

#### 1.1 Product identifier

Name	GC 32
Product form	Mixture
Chemical structure	
Product code	BU Direct Fastening

#### 1.2 Other means of identification

No additional information available

#### 1.3 Recommended use of the chemical and restrictions on use

Recommended use	For professional use only Propellant for direct fastening tools.
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#### 1.4 Details of manufacturer or importer

##### Supplier

Hilti (New Zealand) Ltd.  
Level 1, Building B 600 South Road Ellerslie  
Auckland 1051  
New Zealand  
T +64 9 571 9995  
, 800 444 584 toll free - F +64 9526 7780  
[servicenz@hilti.com](mailto:servicenz@hilti.com)

##### Department issuing data specification sheet

Hilti AG  
Feldkircherstraße 100  
Schaan 9494  
Liechtenstein  
T +423 234 2111  
[df-hse@hilti.com](mailto:df-hse@hilti.com)

#### 1.5. Emergency phone number

Emergency number	Emergency contact (24 hours per day) GBK GmbH Global Regulatory Compliance +49 (0)6132-84463
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### SECTION 2: Hazard identification

#### 2.1. Classification of the hazardous chemical

HSNO Approval Number HSR002532

#### Classification according to the Environmental Protection Authority notices (EPA Hazardous Substances and New Organisms Act 1996)

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

#### 2.2. GHS Label elements, including precautionary statements

##### GHS NZ labelling

Hazard pictograms (GHS NZ)



Signal word (GHS NZ)	Danger
Hazard statements (GHS NZ)	H220 - Extremely flammable gas H280 - Contains gas under pressure; may explode if heated
Precautionary statements	P102 - Keep out of reach of children.
Prevention	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.

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Response P381 - In case of leakage, eliminate all ignition sources.  
Storage 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 which do not result in classification

No additional information available

## SECTION 3: Composition and information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to GHS NZ
but-1-ene	CAS-No.: 106-98-9	45 - <55	Flam. Gas 1A, H220 Press. Gas (Comp.), H280 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
propene	CAS-No.: 115-07-1	35 - <45	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Propane	CAS-No.: 74-98-6	5 - <10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280

## SECTION 4: First-aid measures

### 4.1. Description of necessary 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. Wash skin with plenty of 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. Rinse eyes with water as a precaution.  
First-aid measures after ingestion Immediately consult a doctor/medical service. Call a poison center or a doctor if you feel unwell.

### 4.2. Symptoms caused by exposure

No additional information available

### 4.3. Medical attention and special treatment

Other medical advice or treatment Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

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

### 5.2. Specific hazards arising from the chemical

Fire hazard Extremely flammable gas.  
Explosion hazard Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.  
General measures Evacuate area. Remove ignition sources.

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

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions      DO NOT fight fire when fire reaches explosives. Evacuate area. Eliminate all ignition sources if safe to do so. Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

Protection during firefighting      Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus. Do not attempt to take action without suitable protective equipment. Complete protective clothing.

Other information      EN 12942. EN 12941.

EAC code      2YE - 2YE

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

### 6.2. Environmental precautions

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

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

Methods for cleaning up      Do not flush with water. Notify authorities if product enters sewers or public waters.

## 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      Ensure good ventilation of the work station. Wear personal protective equipment. 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. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Eliminate all ignition sources if safe to do so.

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. Protect from sunlight. Store in a well-ventilated place. Keep cool.

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

Storage temperature      5 – 25 °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.



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Flash point	-88.6 °C
Auto-ignition temperature	287 °C
Flammability	No additional information available
Vapour pressure	Vapour pressure: 8300 hPa
Relative density	No additional information available
Density	Density: 0.6 g/cm <sup>3</sup> (DIN 51757)
Solubility	insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Viscosity, dynamic	No data available
Explosive properties	Product is not explosive. In use, may form flammable/explosive vapour-air mixture.
Explosive limits	1.6 vol % 11.1 g/m <sup>3</sup> 1.6 vol % 11.1 vol %
Minimum ignition energy	No data available
Gas group	Gases under pressure : Compressed gas

### SECTION 10: Stability and reactivity

Reactivity	Extremely flammable gas.
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.
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
Conditions to avoid	Heat. Sparks. Open flame. Direct sunlight. Overheating. Avoid contact with hot surfaces. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials	No additional information available
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

#### 11.1. Toxicity

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)

<b>propene (115-07-1)</b>	
LC50 Inhalation - Rat	> 688 mg/m <sup>3</sup>
<b>Propane (74-98-6)</b>	
LC50 Inhalation - Rat [ppm]	> 280000 ppm (literature)
Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met)
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	Not classified (Not applicable)
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Vaporizer	Container fitted with a sealed spray attachment

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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 and can not be released.  
The dismantling of the article is prohibited.

### SECTION 12: Ecological information

#### 12.1. Ecotoxicity

Ecology - general	Due to the consistency along with the low water solubility of the product a bioavailability is unlikely.
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 (chronic)	Not classified.
Soil toxicity	Not classified (Based on available data, the classification criteria are not met)
Terrestrial vertebrate toxicity	Not classified
Terrestrial invertebrate toxicity	Not classified
Other information	Avoid release to the environment.

#### but-1-ene (106-98-9)

LC50 - Fish [1]	14.8 mg/l (72 h; Quantitative structure-activity relationship (QSAR); Oncorhynchus mykiss)
EC50 - Crustacea [1]	18.7 mg/l (48 h; Quantitative structure-activity relationship (QSAR); Daphnia sp.)

#### 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))
Partition coefficient n-octanol/water (Log Kow)	1.77 (20 °C)

#### 12.2. Persistence and degradability

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Persistence and degradability	No additional information available
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##### but-1-ene (106-98-9)

Not rapidly degradable	
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##### propene (115-07-1)

Persistence and degradability	Readily biodegradable in water.
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##### Propane (74-98-6)

Persistence and degradability	Readily biodegradable in water.
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#### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available
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##### 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).
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### 12.4. Mobility in soil

<b>GC 32</b>	
Mobility in soil	No additional information available
<b>propene (115-07-1)</b>	
Partition coefficient n-octanol/water (Log Kow)	1.77 (20 °C)

### 12.5. Other adverse effects

Ozone	Not classified (Based on available data, the classification criteria are not met)
Other adverse effects	No additional information available

## SECTION 13: Disposal considerations

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	Container under pressure. Do not drill or burn even after use.
Additional information	Flammable vapours may accumulate in the container.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
<b>14.1. UN number or ID number</b>			
UN 3150	UN 3150	UN 3150	UN 3150
<b>14.2. UN proper shipping name</b>			
HYDROCARBON GAS REFILLS FOR SMALL DEVICES	HYDROCARBON GAS REFILLS FOR SMALL DEVICES	Hydrocarbon gas Refills for small devices	HYDROCARBON GAS REFILLS FOR SMALL DEVICES
<b>Transport document description</b>			
UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1, (D)	UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1	UN 3150 Hydrocarbon gas Refills for small devices, 2.1	UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1
<b>14.3. Transport hazard class(es)</b>			
2.1	2.1	2.1	2.1
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available			

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	6F
Limited quantities (ADR)	0

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Excepted quantities (ADR)	E0
Packing instructions (ADR)	P209
Mixed packing provisions (ADR)	MP9
Transport category (ADR)	2
Special provisions for carriage - Loading, unloading and handling (ADR)	CV9
Special provisions for carriage - Operation (ADR)	S2
Tunnel restriction code (ADR)	D
EAC code	2YE

### Transport by sea

Limited quantities (IMDG)	0
Excepted quantities (IMDG)	E0
Packing instructions (IMDG)	P003
EmS-No. (Fire)	F-D
EmS-No. (Spillage)	S-U
Stowage category (IMDG)	B
Stowage and handling (IMDG)	SW2
MFAG-No	115

### Air transport

PCA Excepted quantities (IATA)	E0
PCA Limited quantities (IATA)	Forbidden
PCA limited quantity max net quantity (IATA)	Forbidden
PCA packing instructions (IATA)	201
PCA max net quantity (IATA)	1kg
CAO packing instructions (IATA)	201
CAO max net quantity (IATA)	15kg
Special provisions (IATA)	A802
ERG code (IATA)	10L

### Rail transport

Classification code (RID)	6F
Limited quantities (RID)	0
Excepted quantities (RID)	E0
Packing instructions (RID)	P209
Mixed packing provisions (RID)	MP9
Transport category (RID)	2
Special provisions for carriage - Loading, unloading and handling (RID)	CW9
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 specific for the product in question

#### Hazardous Substances and New Organisms Act

HSNO Approval Number HSR002532

### 15.2. Chemical safety assessment

No additional information available



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### SECTION 16: Other information

SDS Major/Minor	None
Issue date	27/06/2023
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Supersedes	20/03/2018

Indication of changes			
Section	Changed item	Change	Comments
	General		
1	Use of the substance/mixture	Modified	
8.2	Personal protective equipment	Modified	
9	Physical and chemical hazards	Modified	
11	Toxicological information	Modified	
12	Ecotoxicological information	Modified	

#### Data sources

European Chemicals Agency, <http://echa.europa.eu/>. manufacturer.

#### Abbreviations and 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

#### Training advice

Department issuing data specification sheet.

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Full text of H-statements	
Aquatic Acute 3	Hazardous to the aquatic environment – Acute Hazard, Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Flam. Gas 1A	Flammable gases, Category 1A
Press. Gas (Comp.)	Gases under pressure : Compressed gas
H220	Extremely flammable gas
H280	Contains gas under pressure; may explode if heated
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

SDS NZ 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.