

GC 22

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 28/11/2017

Revision date: 28/11/2017

Supersedes: 06/08/2013

Version: 23.1

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

1.1. Product identifier

Product form Mixture
Product name GC 22
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

No additional information available

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Gt. Britain) Ltd.
1 Trafford Wharf Road
Trafford Park
M17 1BY Manchester - Great Britain
T +44 161 886 1000
0800 886 100 Toll-free - F +44 161 872 1240
gbsales@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH
Hiltistrasse 6
86916 Kaufering - Deutschland
T +49 8191 906310 - F +49 8191 90176310
df-hse@hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service
+41 44 251 51 51 (international)
+44 161 886 1000
0800 886 100 Toll-free

Country	Organisation/Company	Address	Emergency number
United Kingdom	National Poisons Information Service (NPIS) City Hospital	Dudley Road B18 7QH Birmingham	111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable gases, Category 1 H220
Gases under pressure : Compressed gas H280
Full text of hazard classes and H-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]

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Hazard pictograms (CLP)



GHS02

Signal word (CLP)

Danger

Hazard statements (CLP)

H220 - Extremely flammable gas.
H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (CLP)

P102 - Keep out of reach of children.
P251 - Do not pierce or burn, even after use.
P210 - Keep away from heat, hot surfaces, open flames, sparks. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

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 Regulation (EC) No. 1272/2008 [CLP]
Isobutane	(CAS-No.) 75-28-5 (EC-No.) 200-857-2 (EC Index-No.) 601-004-00-0	55 - <65	Flam. Gas 1, H220 Press. Gas (Comp.), H280
propene	(CAS-No.) 115-07-1 (EC-No.) 204-062-1 (EC Index-No.) 601-011-00-9	20 - <30	Flam. Gas 1, H220 Press. Gas (Comp.), H280
Propane	(CAS-No.) 74-98-6 (EC-No.) 200-827-9 (EC Index-No.) 601-003-00-5	5 - <15	Flam. Gas 1, H220 Press. Gas (Comp.), H280

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 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

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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	Carbon dioxide. Alcohol-resistant foam. Water spray. Dry powder.
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	Formation of toxic gases is possible during heating or in case of fire. 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.
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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.
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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.
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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.

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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 °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

No additional information available

8.2. Exposure controls

Appropriate engineering controls	Ensure good ventilation of the work station.
Hand protection	In case of repeated or prolonged contact wear gloves

Type	Material	Permeation	Thickness (mm)	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	0,12	EN 374

Eye protection Chemical goggles or safety glasses

Type	Use	Characteristics	Standard
Safety glasses		clear	EN 166, EN 170

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



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Gas
Colour	Colourless.
Odour	Sweet.
Odour threshold	No data available
pH	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	> 460 °C
Decomposition temperature	No data available

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Flammability (solid, gas)	No data available
Vapour pressure	8300 hPa
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	0.58 g/cm ³ (DIN 51757)
Solubility	insoluble in water.
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Product is not explosive. In use, may form flammable/explosive vapour-air mixture.
Oxidising properties	No data available
Explosive limits	1.7 vol % 11.1 vol %

9.2. Other information

Gas group	Compressed gas
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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

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

Isobutane (75-28-5)	
LC50 inhalation rat (mg/l)	> 50 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	11000 ppm
propene (115-07-1)	
LC50 inhalation rat (mg/l)	658 mg/l/4h (Rat; Literature)

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Propane (74-98-6)	
LC50 inhalation rat (mg/l)	513 mg/l/4h (Rat; Literature)
LC50 inhalation rat (ppm)	280000 ppm/4h (Rat; Literature)
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
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Vaporizer	Container fitted with a sealed spray attachment

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	Not classified
Chronic aquatic toxicity	Not classified

Isobutane (75-28-5)	
Threshold limit algae 1	1.07 mg/l (Algae)
Threshold limit algae 2	7.15 mg/l (72 h; Algae)
propene (115-07-1)	
Threshold limit algae 1	3 - 15, Algae; QSAR
Threshold limit algae 2	10 - 100, Algae; Estimated value
Propane (74-98-6)	
TLM fish 1	17.8 - 19.7, 96 h; Pimephales promelas
Threshold limit algae 1	1.45 - 4.53, 72 h; Algae
Threshold limit algae 2	8 mg/l (72 h; Algae)

12.2. Persistence and degradability

Isobutane (75-28-5)	
Persistence and degradability	Inherently biodegradable. Biodegradable in the soil. Not applicable (gas).
propene (115-07-1)	
Persistence and degradability	Not readily biodegradable in water. Inherently biodegradable. Biodegradable in the soil. Ozonation in the air. Photodegradation in the air.
Biochemical oxygen demand (BOD)	0 g O ₂ /g substance
ThOD	3.43 g O ₂ /g substance
BOD (% of ThOD)	(5 day(s)) 0
Propane (74-98-6)	
Persistence and degradability	Readily biodegradable in water. Not applicable (gas). Photodegradation in the air.

12.3. Bioaccumulative potential

Isobutane (75-28-5)	
BCF fish 1	20 - 52 (Pisces; QSAR)
BCF other aquatic organisms 1	20 - 52 (Daphnia magna; QSAR)
Log Pow	2.8 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
propene (115-07-1)	
Log Pow	1.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Propane (74-98-6)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. Mobility in soil

Isobutane (75-28-5)	
Surface tension	0.014 N/m (-10 °C)
propene (115-07-1)	
Surface tension	0.02 N/m (-50 °C)
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.
Propane (74-98-6)	
Surface tension	0.016 N/m (-47 °C)

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
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.
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 / IATA / IMDG / RID

Other information No supplementary information available

ADR	IMDG	IATA	RID
14.1. UN number			
3150	3150	3150	3150
14.2. UN proper shipping name			
HYDROCARBON GAS REFILLS FOR SMALL DEVICES	HYDROCARBON GAS REFILLS FOR SMALL DEVICES	Hydrocarbon gas Refills for small devices	HYDROCARBON GAS REFILLS FOR SMALL DEVICES
Transport document description			
UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1, (D)	UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1		
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
			
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable

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ADR	IMDG	IATA	RID
14.5. Environmental hazards			
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
Packing instructions (ADR)	P208
Mixed packing provisions (ADR)	MP9
Tunnel restriction code (ADR)	D
EAC code	2YE

- Transport by sea

Limited quantities (IMDG)	0
Packing instructions (IMDG)	P003
EmS-No. (Fire)	F-D
EmS-No. (Spillage)	S-U
Stowage category (IMDG)	B
Stowage and segregation (IMDG)	Clear of living quarters.
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)	P208
Carriage prohibited (RID)	No

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

15.1.2. National regulations

15.2. Chemical safety assessment

No additional information available

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SECTION 16: Other information

Full text of H- and EUH-statements:

Flam. Gas 1	Flammable gases, Category 1
Press. Gas (Comp.)	Gases under pressure : Compressed gas
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.

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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