

Safety Data Sheet

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

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

1.1. Product identifier

Product form Mixture Name GC 21

Product code **BU Direct Fastening**



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

Use of the substance/mixture Propellant for direct fastening tools

Gas can for use exclusively with the Hilti GX 120 tool

1.3. Details of the supplier of the safety data sheet

Supplier

Hilti (Philippines) Inc. Robinsons Cyberscape Beta 1605 Pasig City - Philippinen T +632 784 7100 - F +632 843 0061

customerservice.ph@hilti.com

Department issuing data specification sheet

Hilti Entwicklungsgesellschaft mbH

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df-hse@hilti.com

1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

H222;H229 Aerosol 1

Full text of hazard classes and H-statements : see section 16

2.2. Label elements

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

Hazard pictograms (GHS-UN)



GHS02

Signal word (GHS-UN)

Hazard statements (GHS-UN)

H222 - Extremely flammable aerosol

H229 - Pressurised container: May burst if heated

Precautionary statements (GHS-UN) P102 - Keep out of reach of children

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking

Danger

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

P251 - Do not pierce or burn, even after use

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

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2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to the United Nations GHS
Isobutane	(CAS No) 75-28-5	70 - <80	Flam. Gas 1, H220 Compressed gas, H280
propene	(CAS No) 115-07-1	10 - <20	Pyr. Gas Not classified Flam. Gas 1, H220 Compressed gas, H280
Propane	(CAS No) 74-98-6	5 - 10	Flam. Gas 1, H220 Compressed gas, H280 Acute Tox. Not classified (Inhalation:gas)
Butane	(CAS No) 106-97-8	2.5 - 5	Flam. Gas 1, H220 Compressed gas, H280 Acute Tox. Not classified (Inhalation:gas)

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general Remove/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. If skin irritation or rash occurs: Get medical

advice/attention.

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 immediate medical advice/attention.

First-aid measures after ingestion Get immediate medical advice/attention.

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

Symptoms/injuries after inhalation Shortness of breath.

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 Water spray. Carbon dioxide. Dry powder. Foam. Sand.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard Extremely flammable aerosol.

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

burns and injuries.

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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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Evacuate area. No flames, no sparks. Eliminate all sources of ignition.

6.1.1.For non-emergency personnel

Emergency procedures Ventilate spillage area. Avoid breathing vapours. Evacuate unnecessary personnel.

6.1.2. For emergency responders

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

Emergency procedures Ventilate area.

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 storage

7.1. Precautions for safe handling

Additional hazards when processed Hazardous waste due to potential risk of explosion. Pressurized container: Do not pierce or

burn, even after use.

Precautions for safe handling Do not eat, drink or smoke when using this product. Do not breathe vapours. Avoid contact with

skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

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. Do not expose to temperatures exceeding 50 °C/ 122 °F.

Keep in fireproof place.

Incompatible materials Heat sources. Direct sunlight.

Storage temperature 5 - 25 °C

Heat and ignition sources

Keep away from heat and direct sunlight.

Prohibitions on mixed storage

Do not store with DX powder cartridges.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Ensure good ventilation of the work station.

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

Hand protection In case of repeated or prolonged contact wear

gloves

Туре	Material	Permeation	Thickness (mm)	Penetratio n	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,4		EN 374

Eye protection Chemical goggles or safety glasses. EN 166. EN

170

Туре	Use	Characteristics	Standard
Safety glasses	Droplet	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 Appearance Aerosol. Colour Colourless. characteristic. Odour No data available Odour threshold No data available Relative evaporation rate (butylacetate=1) No data available No data available Melting point No data available Freezing point Boiling point No data available Flash point No data available No data available Auto-ignition temperature Decomposition temperature No data available No data available Flammability (solid, gas) 3000 hPa Vapour pressure Relative vapour density at 20 °C No data available Relative density No data available

Density 0.56 g/cm³ (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 No data available

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available

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

Carbon dioxide. Carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	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
Specific target organ toxicity (single exposure)	Not classified
Specific target organ toxicity (repeated exposure)	Not classified
A and institute to a more of	Nick classified

Aspiration hazard Not classified

GC 21

Vaporizer Container fitted with a sealed spray attachment

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. 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.

Waste 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 / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID		
14.1. UN number					
1950	1950	1950	1950		
14.2. UN proper shipping nam	ne				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS		
Transport document descript	ion				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1				
14.3. Transport hazard class(es)					
2.1	2.1	2.1	2.1		
2	2	2	2		
14.4. Packing group					
Not applicable	Not applicable	Not applicable	Not applicable		
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) 5I

Special provisions (ADR) 190, 327, 344, 625

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Limited quantities (ADR)

Packing instructions (ADR) P207, LP02
Mixed packing provisions (ADR) MP9
Tunnel restriction code (ADR) D

- Transport by sea

Stowage category (IMDG)

Special provisions (IMDG) 63, 190, 277, 327, 344, 959

Limited quantities (IMDG)SP277Packing instructions (IMDG)P207, LP02EmS-No. (Fire)F-DEmS-No. (Spillage)S-U

Stowage and segregation (IMDG) Protected from sources of heat For AEROSOLS with a maximum capacity of 1 litre: Category

A. Segregation as for class 9 but 'Separated from' class 1 except division 1.4. For AEROSOLS with a capacity above 1 litre: Category B. Segregation as for the appropriate sub-division of class 2. For WASTE AEROSOLS: Category C. Clear of living quarters. Segregation as for the

appropriate sub-division of class 2.

None

MFAG-No 126

- Air transport

PCA packing instructions (IATA) 203
PCA max net quantity (IATA) 75kg
Special provisions (IATA) A145, A167

- Rail transport

Special provisions (RID) 190, 327, 344, 625

Limited quantities (RID) 1L

Packing instructions (RID) P207, LP02

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

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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

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