GC FX 3

Safety Data Sheet

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

Issue date: 08/04/2020 Revision date: 08/04/2020 : Version: 1.0

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

1.1. Product identifier

Product form	Mixture
Generic name	GC FX 3
UN-No. (ADR)	1956
Product code	BU Direct Fastening

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

Use of the substance/mixture	Gas can for use exclusively with the Hilti FX 3-A tool. For professional use only

1.3. Details of the supplier of the safety data sheet

Supplier
Hilti (South Africa) (Pty) Ltd.
2 Tugela Lane, Waterfall Logistics Precinct
Corner Bridal Veil Road and R101
2090 Midrand - South Africa
T +2711 237300 - F +2711 2373111
Customercare.za@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) +2711 237300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Press. Gas (Comp.) H280
Full text of H statements : see section 16

2.2. Label elements

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

Hazard pictograms (GHS UN)

GHS04

Signal word (GHS UN)	Warning
Hazard statements (GHS UN)	H280 - Contains gas under pressure; may explode if heated.
Precautionary statements (GHS UN)	P251 - Do not pierce or burn, even after use. P402 - Store in a dry place. P403 - Store in a well-ventilated place. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

2.3. Other hazards

Other hazards not contributing to the classification	Asphyxiant in high concentrations.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to the United Nations GHS
argon, compressed	(CAS-No.) 7440-37-1	>= 80	Gases under pressure : Compressed gas, H280
carbon dioxide, liquefied, under pressure	(CAS-No.) 124-38-9	10 - 25	Gases under pressure : Liquefied gas, H280 Hazardous to the aquatic environment — Acute Hazard, Category 3, H402

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Asphyxiant in high concentrations. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness.Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped. Low concentrations of CO2 cause increased respiration and headache.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.

First-aid measures after eye contact: Rinse immediately with plenty of water. Rinse eyes with water as a precaution.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/effects after inhalation: Breathing difficulties.

Potential adverse human health effects and symptoms: 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: The product itself does not burn. Use extinguishing agent suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

Explosion hazard: Contains gas under pressure; may explode if heated.

5.3. Advice for firefighters

Firefighting instructions: In case of fire: stop leak if safe to do so. Continue water spray from protected position until container stays cool.

Protection during firefighting	Wear recommended personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1.For non-emergency personnel

Emergency procedures	Evacuate area. Ventilate spillage area.

6.1.2.For emergency responders

Protective equipment	Do not attempt to take action without suitable protective equipment.
Emergency procedures	Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Provide adequate ventilation.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	Ensure good ventilation of the work station. Pressurized container: Do not pierce or burn, even after use. Damaged valves should be reported immediately to the supplier. Damaged cylinders should be handled by specialists only. Carefully comply with the instructions for use.
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

Storage conditions	Store at temperatures not exceeding 50 °C. Protect from sunlight. Store in a well-ventilated place. Keep cool. Store in a dry place.
Incompatible products	Strong acids. Strong bases. Combustible materials.
Incompatible materials	Sources of ignition. Direct sunlight. Heat sources.
Storage temperature	-20 - 50 °C

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. Systems under pressure should be regularly checked for leakages.
Environmental exposure controls	No specific measures are required provided the product is handled in accordance with the general rules of occupational hygiene and safety. Avoid release to the environment.
Consumer exposure controls	Avoid contact during pregnancy/while nursing.
Other information	Do not eat, drink or smoke during use.

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

Eye protection	Safety glasses

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	odourless.
Odour threshold	No data available
pH	Not applicable
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	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Flammability (solid, gas)	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Solubility	No data available.
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive properties	Not applicable.
Oxidising properties	Not applicable.
Explosive limits	No data available

9.2. Other information

Gas group	Compressed gas
Other properties	Gas/vapour heavier than air. May accumulate in confined spaces, particularly at or below ground level.

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

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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 pH: Not applicable
Serious eye damage/irritation	Not classified pH: Not applicable
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
Potential adverse human health effects and symptoms	No additional information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified

carbon dioxide, liquefied, under pressure (124-38-9)	
LC50 fish 1	35 mg/l (96 h, Salmo gairdneri, Literature study, Lethal)

12.2. Persistence and degradability

GC FX 3	
Persistence and degradability	Not established.

carbon dioxide, liquefied, under pressure (124-38-9)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

argon, compressed (7440-37-1)	
Persistence and degradability	Biodegradability: not applicable.

Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

carbon dioxide, liquefied, under pressure (124-38-9)	
Log Pow	0,83 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

argon, compressed (7440-37-1)	
Log Pow	0,74 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

carbon dioxide, liquefied, under pressure (124-38-9)	
Log Pow	See section 12.1 on ecotoxicology
Ecology - soil	Not applicable (gas).

argon, compressed (7440-37-1)	
Log Pow	See section 12.1 on ecotoxicology

12.5. Other adverse effects

Ozone: Not classified

Other adverse effects: No additional information available

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

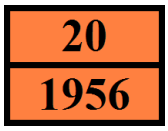
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
14.1. UN number			
1956	1956	1956	1956
14.2. UN proper shipping name			
COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture)	COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture)	Compressed gas, n.o.s. (Argon, Carbon dioxide mixture)	COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture)
Transport document description			
UN 1956 COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture), 2.2	UN 1956 COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture), 2.2	UN 1956 Compressed gas, n.o.s. (Argon, Carbon dioxide mixture), 2.2	UN 1956 COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture), 2.2
14.3. Transport hazard class(es)			
2.2	2.2	2.2	2.2

ADR	IMDG	IATA	RID
			
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)	1A
Special provisions (ADR)	274, 655, 662
Limited quantities (ADR)	120ml
Packing instructions (ADR)	P200
Mixed packing provisions (ADR)	MP9
Transport category (ADR)	3
Orange plates	

- Transport by sea

Special provisions (IMDG)	274
Limited quantities (IMDG)	120 ml
Packing instructions (IMDG)	P200
EmS-No. (Fire)	F-C
EmS-No. (Spillage)	S-V
Stowage category (IMDG)	A
MFAG-No	126

- Air transport

PCA packing instructions (IATA)	200
PCA max net quantity (IATA)	75kg
CAO packing instructions (IATA)	200
Special provisions (IATA)	A202

- Rail transport

Special provisions (RID)	274, 655, 662
Limited quantities (RID)	120ml
Packing instructions (RID)	P200
Carriage prohibited (RID)	No

14.7. Transport in bulk according to Annex II of MARPOL 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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Abbreviations and acronyms

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

BCF - Bioconcentration factor

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

IMDG - International Maritime Dangerous Goods

LC50 - Median lethal concentration

OECD - Organisation for Economic Co-operation and Development

PBT - Persistent Bioaccumulative Toxic

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

vPvB - Very Persistent and Very Bioaccumulative

Full text of H-statements:

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.