GC FX 3

Safety Data Sheet

according to the Model Work Health and Safety Regulations

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

SECTION 1: Identification : Product identifier and chemical identity

1.1. Product identifier

Product form	Mixture
Generic name	GC FX 3
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	Gas can for use exclusively with the Hilti FX 3-A tool. For professional use only

1.4. Supplier's details

Supplier
Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
P.O. Box 3217
2138 Rhodes NSW - Australia
T +61 131 292 - F +61 1300 135 042
serviceaustralia@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

1.5. Emergency phone number

Emergency number	+61 2 8748 1000

SECTION 2: Hazards identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Gases under pressure : Compressed gas H280

2.2. Label elements

Hazard pictograms (GHS AU)

GHS04

Signal word (GHS AU)	Warning
Hazard statements (GHS AU)	H280 - Contains gas under pressure; may explode if heated.
Precautionary statements (GHS AU)	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/122 °F.

2.3. Other hazards

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

SECTION 3: Composition/information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
argon, compressed	7440-37-1	>= 80	Press. Gas (Liq.), H280
carbon dioxide, liquefied, under pressure	124-38-9	10 - 25	Press. Gas (Liq.), H280

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. Symptoms caused by exposure

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

Symptoms/effects after inhalation: Breathing difficulties.

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

Other medical advice or treatment: 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, including how the chemical may be safely used

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 - exposure standards

GC FX 3		
Australia	Local name	Carbon dioxide
Australia	TWA (mg/m³)	22500 mg/m³ in coal mines 9000 mg/m³
Australia	TWA (ppm)	12500 ppm in coal mines 5000 ppm
Australia	STEL (mg/m³)	54000 mg/m³ in coal mines 54000 mg/m³
Australia	STEL (ppm)	30000 ppm in coal mines 30000 ppm
Australia	Regulatory reference	Workplace exposure standards for airborne contaminants (2019)

Exposure limit values for the other components

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station. Systems under pressure should be regularly checked for leakages.

8.4. Personal protective equipment

Personal protective equipment	Avoid all unnecessary exposure.
Eye protection	Safety glasses
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.

SECTION 9: Physical and chemical properties

Physical state	Gas
Appearance	
Colour	Colourless
Odour	odourless
Odour threshold	No data available
pH	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Solubility	No data available.
Log Pow	No data available
Viscosity	No data available
Explosive properties	Not applicable.
Oxidising properties	Not applicable
Explosive limits	No data available
Minimum ignition energy	No data available
Fat solubility	No data available
Gas group	Compressed gas

SECTION 10: Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.The product is non-reactive under normal conditions of use, storage and transport
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
Conditions to avoid	Direct sunlight. Extremely high or low temperatures. Moisture.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

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
Other information	Avoid release to the environment.

carbon dioxide, liquefied, under pressure (124-38-9)	
LC50 fish 1	35 mg/l (96 h, Salmo gairdneri, Literature study, Lethal)
Log Pow	0.83 (Experimental value)

argon, compressed (7440-37-1)	
Log Pow	0.74 (Experimental value)

12.2. Persistence and degradability

GC FX 3	
Persistence and degradability	Not established.

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

argon, compressed (7440-37-1)	
Not rapidly degradable	
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	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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

GC FX 3	
Fluorinated greenhouse gases	False
GWPmix comment	No known effects from this product.

carbon dioxide, liquefied, under pressure (124-38-9)	
Fluorinated greenhouse gases	False

argon, compressed (7440-37-1)	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

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

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

Specific storage requirement: No data available

Shock sensitivity: No data available

14.7. Additional information

Other information: No supplementary information available

Transport by road and rail

Not applicable

Transport by sea

UN-No. (IMDG)	1956
Special provisions (IMDG)	274
Limited quantities (IMDG)	120 ml
Packing instructions (IMDG)	P200
EmS-No. (Fire)	F-C - FIRE SCHEDULE Charlie - NON-FLAMMABLE GASES
EmS-No. (Spillage)	S-V - SPILLAGE SCHEDULE Victor - GASES (NON-FLAMMABLE, NON-TOXIC)
Stowage category (IMDG)	A
MFAG-No	126

Air transport

UN-No. (IATA)	1956
PCA packing instructions (IATA)	200
PCA max net quantity (IATA)	75kg
CAO packing instructions (IATA)	200
Special provisions (IATA)	A202

14.8. Hazchem or Emergency Action Code

Hazchem Code: Not applicable

SECTION 15: Regulatory information

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

No additional information available

15.2. International agreements

No additional information available

SECTION 16: Any other relevant information

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
Revision date	08/04/2020

Classification:

Press. Gas (Comp.)	H280

Full text of H-statements:

Press. Gas (Comp.)	Gases under pressure : Compressed gas
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
H280	Contains gas under pressure; may explode if heated.

SDS_AU_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.