GC FX 3

Safety Data Sheet

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

Revision date: 9/3/2025 Issue date: 9/3/2025 Supersedes: 6/2/2025 Version: 3.1

SECTION 1: Identification

1.1. Identification

Product form	Mixture
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, Inc.
Legacy Tower, Suite 1000
7250 Dallas Parkway
US TX 75024 Plano
USA
T +1 9724035800
1-800-879-8000 toll free, F +1 918 254 0522

Department issuing data specification sheet
Hilti AG
Feldkircherstraße 100
FL 9494 Schaan
Liechtenstein
T +423 234 2111
product.compliance-direct.fastening@hilti.com

1.5. Emergency phone number

Emergency number

Emergency CONTACT (24-Hour-Number)
GBK/Infotrac ID 101022
(USA domestic) 1 800 535 5053
or international (001) 352 323 3500

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Gas under pressure : Compressed gas H280 Contains gas under pressure; may explode if heated.
Full text of H-statements: see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)

Signal word (GHS US) Warning
Hazard statements (GHS US) H280 - Contains gas under pressure; may explode if heated
Precautionary statements (GHS US) 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 122 °F (50 °C).

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

Other hazards which do not result in classification: Asphyxiant in high concentrations.

2.5. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
argon	CAS-No.: 7440-37-1	≥ 80	Press. Gas (Comp.), H280
Carbon dioxide	CAS-No.: 124-38-9	10 – 25	Press. Gas (Liq.), H280

Full text of hazard classes and 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 (acute and delayed)

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

Symptoms/effects after inhalation: Respiratory complaints.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: The product is non-combustible. Use extinguishing agent suitable for surrounding fire.

5.2. Specific hazards arising from the chemical

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

5.3. Special protective equipment and precautions for fire-fighters

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

General measures	:	Evacuate area. Mechanically ventilate the spillage area.

For non-emergency personnel

Emergency procedures	:	Evacuate area. Ventilate spillage area.

For emergency responders

Protective equipment	:	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	:	Ventilate area.
Environmental precautions	:	Avoid release to the environment.

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up	:	Provide adequate ventilation.

For further information refer to section 8: "Exposure controls/personal protection",For further information refer to section 13

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 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

GC FX 3
No additional information available

Carbon dioxide (124-38-9)	
No additional information available	
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon dioxide
ACGIH® TLV® TWA	9000 mg/m³
	5000 ppm
ACGIH® TLV® STEL	54000 mg/m³
	30000 ppm
Remark (ACGIH)	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025
USA - OSHA - Occupational Exposure Limits	
Local name	Carbon dioxide
OSHA PEL TWA	9000 mg/m³
	5000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
USA - NIOSH - Occupational Exposure Limits	
Local name	Carbon dioxide
NIOSH REL 10h TWA	5000 ppm
NIOSH REL STEL	30000 ppm
Regulatory reference (US-NIOSH)	OSHA Annotated Table Z-1 (NIOSH Pocket Guide to Chemical Hazards (NPG))

argon (7440-37-1)	
No additional information available	
USA - ACGIH - Occupational Exposure Limits	
Local name	Argon
Remark (ACGIH)	TLV® Basis: Asphyxia
Regulatory reference	ACGIH 2025

8.2. Appropriate engineering controls

Appropriate engineering controls	Ensure good ventilation of the work station. Systems under pressure should be regularily 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.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Not required for normal conditions of use

Eye protection:		
Safety glasses		
Type	**Field of application**	**Characteristics**
Safety glasses		clear

Respiratory protection:
Keep self contained breathing apparatus readily available for emergency use.

Personal protective equipment symbol(s):

Thermal hazard protection:
No information available.

Other information:
Do not eat, drink or smoke during use.

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
Melting point	Not applicable
Freezing point	Not applicable
Boiling point	Not applicable
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Non flammable
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Relative vapour density at 20°C	No data available
Particle size	Not applicable
Relative density	No data available
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

9.2. Other information

Gas group	Gases under pressure : 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 (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)

Carbon dioxide (124-38-9)	
ATE US (gases)	167857 ppmv/4h

Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met) pH: Not applicable
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 applicable
Viscosity, kinematic	No data available
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after inhalation	Respiratory complaints.

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.

Carbon dioxide (124-38-9)	
LC50 - Fish [1]	35 ppm (96 h; Salmo gairdneri; Literature data)

12.2. Persistence and degradability

GC FX 3	
Persistence and degradability	Not established.

Carbon dioxide (124-38-9)	
Persistence and degradability	Not applicable.

argon (7440-37-1)	
Persistence and degradability	Not applicable.

12.3. Bioaccumulative potential

Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Pow)	0.83 (Measured)

argon (7440-37-1)	
Partition coefficient n-octanol/water (Log Pow)	0.74 (Measured)

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on global warming: No known effects from this product.

Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal 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 DOT / TDG / IMDG / IATA

DOT	TDG	IMDG	IATA
14.1. UN number			
1956	UN1956	1956	1956
14.2. Proper Shipping Name			
Compressed gas, n.o.s.	COMPRESSED GAS, N.O.S.	COMPRESSED GAS, N.O.S.	Compressed gas, n.o.s.
14.3. Transport hazard class(es)			
2.2	2.2	2.2	2.2

DOT	TDG	IMDG	IATA
			
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	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No
No supplementary information available			

14.6. Special precautions for user

DOT

UN-No. (DOT)	:	UN1956
DOT Packaging Exceptions (49 CFR 173.xxx)	:	306;307
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	302, 305
DOT Packaging Bulk (49 CFR 173.xxx)	:	314, 315
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	75 kg
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	150 kg
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.

TDG

UN-No. (TDG)	:	UN1956

TDG Special Provisions	:	16 - (1) The technical name of at least one of the most dangerous substances that predominantly contributes to the danger or dangers posed by the dangerous goods must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(ii)(A). The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3). (2) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical name: (a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; (b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; (c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; (d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or (e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. (3) Despite subsection (1), the technical name for the following dangerous goods is not required to be shown on a small means of containment: (a) UN2814, INFECTIOUS SUBSTANCE, AFFECTING HUMANS; or (b) UN2900, INFECTIOUS SUBSTANCE, AFFECTING ANIMALS,148 - (1) Part 5 (Means of Containment) does not apply to radiation detectors that contain these dangerous goods in non-refillable pressure receptacles if (a) the working pressure in each receptacle is less than 5 000 KPa; (b) the capacity of each receptacle is less than 12 L; (c) each receptacle has a minimum burst pressure of (i) at least 3 times the working pressure, when the receptacle is fitted with a relief device, or (ii) at least 4 times the working pressure, when the receptacle is not fitted with a relief device; (d) each receptacle is manufactured from material that will not fragment upon rupture; (e) each detector is manufactured under a quality assurance program; (f) the detectors are transported in strong outer means of containment; and (g) a detector in its outer means of containment is capable of withstanding a 1.2 m drop test without breakage of the detector or rupture of the outer means of containment. (2) Part 5 (Means of Containment) does not apply to radiation detectors that contain these dangerous goods in non-refillable pressure receptacles and that are included in equipment, if (a) the conditions set out in paragraphs (1)(a) to (e) are met; and (b) the equipment is contained in a strong outer means of containment or the equipment affords the detectors with protection that is equivalent to that provided by a strong outer means of containment. (3) These Regulations, except for Parts 1 and 2, do not apply to radiation detectors that contain these dangerous goods in non-refillable pressure receptacles, including detectors in radiation detection systems, if the detectors meet the requirements of subsection (1) or (2), as applicable, and the capacity of the receptacles that contain the detectors is less than 50 mL.
Explosive Limit and Limited Quantity Index	:	0.125 L
Excepted quantities (TDG)	:	E0
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	:	75 L
Emergency Response Guide (ERG) Number	:	126

IMDG

Special provisions (IMDG)	:	274, 378, 392
Limited quantities (IMDG)	:	120 ml
Excepted quantities (IMDG)	:	E1
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

Flash point (IMDG)	:	
Properties and observations (IMDG)	:	
MFAG-No	:	126

IATA

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	200
PCA max net quantity (IATA)	:	75kg
CAO packing instructions (IATA)	:	200
CAO max net quantity (IATA)	:	150kg
Special provisions (IATA)	:	A202
ERG code (IATA)	:	2L

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Carbon dioxide(124-38-9)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List
argon(7440-37-1)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York City - Right to Know Hazardous Substances List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to 29 CFR § 1910.1200, Hazard Communication Standard (HCS)

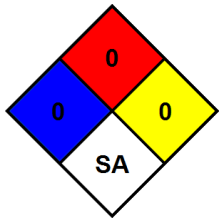
Revision date	09/03/2025
Data sources	European Chemicals Agency, http://echa.europa.eu/. manufacturer.

Full text of hazard classes and H-statements	
H280	Contains gas under pressure; may explode if heated

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 disruptor
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

Abbreviations and acronyms	
NOAEC	No-Observed Adverse Effect Concentration
LOAEL	Lowest Observed Adverse Effect Level

NFPA health hazard	0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	0 - Material that in themselves are normally stable, even under fire conditions.
NFPA specific hazard	SA - Materials that are simple asphyxiants.



Indication of changes:			
Section	**Changed item**	**Change**	**Comments**
1	Emergency number	Modified	

SDS US 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.