

GC FX 3

Safety Data Sheet

according to the United Nations GHS (Rev. 9, 2021)

Issue date: 05/04/2023

Revision date: 05/04/2023

Supersedes: 08/04/2020

Version: 2.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form	Mixture
Name	GC FX 3
UN-No. (ADR)	1956
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

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

Supplier

P.T. Hilti Nusantara
The Garden Center Level 3 No. 3-11B, Kawasan Komersial Cilandak Jl.
Raya Cilandak KKO
ID- 12560 Jakarta
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Department issuing data specification sheet

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1.5. Emergency phone number

Emergency number	Schweizerisches Toxikologisches Informationszentrum – 24h Service +41 44 251 51 51 (international) +62 21 789 0850
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SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification according to the United Nations GHS

Gases under pressure : Compressed gas	H280	Expert judgement
Full text of H-statements: see section 16		
Adverse physicochemical, human health and environmental effects	Contains gas under pressure; may explode if heated.	

2.2. GHS Label elements, including precautionary statements

Labelling according to the United Nations GHS

Hazard pictograms (GHS UN)



Signal word (GHS UN)

Hazard statements (GHS UN)

Precautionary statements (GHS UN)

Warning

H280 - Contains gas under pressure; may explode if heated

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.

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2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification No additional information available

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	CAS-No.: 7440-37-1	≥ 80	Press. Gas (Comp.), H280
Carbon dioxide	CAS-No.: 124-38-9	10 – 25	Press. Gas (Liq.), H280 Aquatic Acute 3, H402

Full text of H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of necessary 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. 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/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. Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable 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 actions 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.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Evacuate area. Mechanically ventilate the spillage area.
 Personal Precautions, Protective Equipment and Emergency Procedures Do not attempt to take action without suitable protective equipment. Ventilate area.

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. For further information refer to section 8: "Exposure controls/personal protection".
 Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials 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 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 well-ventilated 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)

Hand protection Not required for normal conditions of use
 Eye protection Safety glasses

Type	Field of application	Characteristics	Standard
Safety glasses		clear	EN 166, EN 170

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

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Personal protective equipment symbol(s)



8.4. Exposure limit values for the other components

No additional information available

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	Gas
Colour	Colourless.
Odour	odourless.
Odour threshold	Not available
Melting point	Not applicable
Freezing point	Not applicable
Boiling point	Not available
Flammability	Non flammable.
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	Not applicable
pH solution	Not applicable
Viscosity, kinematic (calculated value) (40 °C)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Density	Not applicable
Relative density	Not applicable
Relative vapour density at 20°C	Not available
Solubility	No data available.
Particle size	Not applicable

9.2. Data relevant with regard to physical hazard classes (supplemental)

Explosive properties	Not applicable
Oxidising properties	Not applicable
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.

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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)
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 classified (Based on available data, the classification criteria are not met)

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 (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	Not classified (Based on available data, the classification criteria are not met)

Carbon dioxide (124-38-9)

LC50 - Fish [1]	35 mg/l (96 h; Salmo gairdneri; Literature data)
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12.2. Persistence and degradability

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

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

Not rapidly degradable	
Persistence and degradability	Not applicable.

12.3. Bioaccumulative potential

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Bioaccumulative potential	No additional information available
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Carbon dioxide (124-38-9)	
Partition coefficient n-octanol/water (Log Kow)	0,83 (Measured)
argon (7440-37-1)	
Partition coefficient n-octanol/water (Log Kow)	0,74 (Measured)

12.4. Mobility in soil

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Mobility in soil	No additional information available

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. 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 ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 1956	UN 1956	UN 1956	UN 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, (E)	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
			
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			

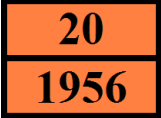
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14.6. Special precautions for user

Overland transport

Classification code (ADR)	1A
Special provisions (ADR)	274, 378, 392
Limited quantities (ADR)	120ml
Excepted quantities (ADR)	E1
Packing instructions (ADR)	P200
Mixed packing provisions (ADR)	MP9
Portable tank and bulk container instructions (ADR)	(M)
Tank code (ADR)	CxBN(M)
Tank special provisions (ADR)	TA4, TT9
Vehicle for tank carriage	AT
Transport category (ADR)	3
Special provisions for carriage - Loading, unloading and handling (ADR)	CV9, CV10, CV36
Hazard identification number (Kemler No.)	20
Orange plates	

Tunnel restriction code (ADR)	E
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Transport by sea

Special provisions (IMDG)	274, 378, 392
Limited quantities (IMDG)	120 ml
Excepted quantities (IMDG)	E1
Packing instructions (IMDG)	P200
EmS-No. (Fire)	F-C
EmS-No. (Spillage)	S-V
Stowage category (IMDG)	A
MFAG-No	126

Air transport

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

Rail transport

Classification code (RID)	1A
Special provisions (RID)	274, 378, 392, 655, 662
Limited quantities (RID)	120ml
Excepted quantities (RID)	E1
Packing instructions (RID)	P200
Mixed packing provisions (RID)	MP9
Portable tank and bulk container instructions (RID)	(M)
Tank codes for RID tanks (RID)	CxBN(M)
Special provisions for RID tanks (RID)	TA4, TT9
Transport category (RID)	3
Special provisions for carriage - Loading, unloading and handling (RID)	CW9, CW10, CW36
Colis express (express parcels) (RID)	CE3

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Hazard identification number (RID) 20

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Regulatory reference Not listed on the United States TSCA (Toxic Substances Control Act) inventory.

SECTION 16: Other information

Issue date 05/04/2023
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Supersedes 08/04/2020

Section	Changed item	Change	Comments
8.2	Personal protective equipment	Modified	
12.	Ecotoxicological information	Modified	
15	Regulatory information	Added	

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 disrupting properties
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



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NOAEL - No-Observed Adverse Effect Level
NOAEC - No-Observed Adverse Effect Concentration
LOAEL - Lowest Observed Adverse Effect Level

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.