

Safety Data Sheet

according to the Hazardous Products Regulation (WHMIS 2015) Issue date: 04/05/2023 Revision date: 04/0

Revision date: 04/05/2023

Supersedes: 04/08/2020 Version: 2.0

SECTION 1: Identification

1.1. Product identifier

Product form Mixture GC FX 3 Name

Product code **BU Direct Fastening**

1.2. Recommended use and restrictions on use

Recommended use Gas can for use exclusively with the Hilti FX 3-A tool, For professional use only

1.3. Supplier

Supplier Department issuing data specification sheet

Hilti (Canada) Corp. Hilti Entwicklungsgesellschaft mbH

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1-800-363-4458 toll free - F +1 905 813 9009 df-hse@hilti.com

1.4. Emergency telephone number

Emergency number Chem-Trec

Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada)

Tel.: 703 527 3887 (Other countries)

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Classification (GHS CA)

Gases 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 CA labelling

Hazard pictograms (GHS CA)



Signal word (GHS CA) Warning

Hazard statements (GHS CA) H280 - Contains gas under pressure; may explode if heated.

Precautionary statements (GHS CA) 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 which do not result in classification No additional information available.

2.4. Unknown acute toxicity (GHS CA)

No data available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	%	Classification (GHS CA)
argon	argon	CAS-No.: 7440-37-1	65 - 85	Press. Gas (Comp.), H280
Carbon dioxide	Carbon dioxide	CAS-No.: 124-38-9	65 - 85	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 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.

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).

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

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. Unsuitable extinguishing media

No additional information available

5.3. Specific hazards arising from the hazardous product

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

5.4. 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.

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

Emergency Procedures

6.2. Methods and materials for containment and cleaning up

Methods for cleaning up Provide adequate ventilation.

6.3. Reference to other sections

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

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

No additional information available

8.2. Appropriate engineering controls

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

checked for leakages.

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

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Туре	Field of application	Characteristics
Safety glasses		clear

Respiratory protection:

Keep self contained breathing apparatus readily available for emergency use.

Personal protective equipment symbol(s):



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

Appearance No data available Colour Colourless Odour odourless Odour threshold No data available Not applicable рΗ Relative evaporation rate (butylacetate=1) No data available Relative evaporation rate (ether=1) No data available Melting point No data available Freezing point No data available Boiling point No data available Flash point Not applicable Not applicable Auto-ignition temperature Decomposition temperature No data available Flammability (solid, gas) Non flammable. No data available Vapour pressure No data available Relative vapour density at 20°C Relative density No data available Solubility No data available.

Partition coefficient n-octanol/water (Log Pow)

Viscosity, kinematic

Explosive properties

Oxidising properties

Not applicable.

Not applicable.

Not applicable.

Not applicable.

Not applicable.

9.2. Other information

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Gas group Gases under pressure : Compressed gas

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

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level.

SECTION 10: Stability and reactivity

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



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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.

Incompatible materials No additional information available.

Hazardous decomposition products

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

produced.

Hardening time: No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (dermal)

Acute toxicity (inhalation)

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

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

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

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 sensitization

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

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

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.

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)

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Carbon dioxide (124-38-9)

LC50 - Fish [1]

35 mg/l (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)		
Not rapidly degradable		

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

12.3. Bioaccumulative potential

12101 21000001110101110 potontial	2101 Diodocumulativo potonita		
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

Carbon dioxide (124-38-9)
argon (7440-37-1)

12.5. Other adverse effects

Ozone Not classified

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	ADN	RID	
14.1. UN number or ID numb	per				
UN 1956	UN 1956	UN 1956	UN 1956	UN 1956	
14.2. UN proper shipping na	me				
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)	COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture)	
Transport document descr	iption	<u>I</u>			
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	UN 1956 COMPRESSED GAS, N.O.S. (Argon, Carbon dioxide mixture), 2.2	
14.3. Transport hazard class	14.3. Transport hazard class(es)				
2.2	2.2	2.2	2.2	2.2	
2	2	2	2	2	

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ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not applicable	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	Dangerous for the environment: No

14.6. Special precautions for user

Overland transport

Classification code (ADR) 1A

Special provisions (ADR) 274, 378, 392 120ml Limited quantities (ADR) 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) TA4, TT9 Tank special provisions (ADR) Vehicle for tank carriage ΑT

Special provisions for carriage - Loading, unloading

and handling (ADR)

Transport category (ADR)

Hazard identification number (Kemler No.)

Orange plates

20 1956

Е

CV9, CV10, CV36

Tunnel restriction code (ADR)

Transport by sea

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

Air transport

PCA Excepted quantities (IATA) E1
PCA Limited quantities (IATA) For

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

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Inland waterway transport

Classification code (ADN) 1A

Special provisions (ADN) 274, 378, 392, 655, 662

Limited quantities (ADN) 120 ml
Excepted quantities (ADN) E1
Equipment required (ADN) PP
Number of blue cones/lights (ADN) 0

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)

Colis express (express parcels) (RID) CE3
Hazard identification number (RID) 20

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

15.1. National regulations

GC FX 3	
Canada DSL NDSL Flags	All components of this product are listed, or excluded from listing, on the Canadian Domestic
	Substances List (DSL) / Non-Domestic Substances List (NDSL)

CW9, CW10, CW36

Carbon dioxide (124-38-9)

Listed on the Canadian DSL (Domestic Substances List)

argon (7440-37-1)

Listed on the Canadian DSL (Domestic Substances List)

15.2. International regulations

GC FX 3

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

Carbon dioxide (124-38-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

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argon (7440-37-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory - Status: Active Listed on INSQ (Mexican National Inventory of Chemical Substances)

SECTION 16: Other information

 Issue date
 04-05-2023

 Revision date
 04-05-2023

 Supersedes
 04-08-2020

Indication of changes			
Section	Changed item	Change	Comments
8.2	Personal protective equipment	Modified	
12.	Ecotoxicological information	Modified	
15	Regulation	Modified	

Data sources

European Chemicals Agency, http://echa.europa.eu/. manufacturer.

Full text of H-state	ments:
H280	Contains gas under pressure; may explode if heated.

Abbreviations a	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		

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

SDS CA 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.

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