

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

Issue 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 Department issuing data specification sheet

Hilti (Philippines) Inc.

Hilti Entwicklungsgesellschaft mbH
2256 Pasong Tamo Extension

Hiltistrasse 6

Edsa, Brgy. Magallanes 86916 Kaufering - Deutschland

1224 Makati City - Philippinen T +49 8191 906310 - F +49 8191 90176310

#### 1.4. Emergency telephone number

Emergency number Schweizerisches Toxikologisches Informationszentrum – 24h Service

+41 44 251 51 51 (international)

+632 784 7100

# **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.

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# **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**

11	Description	of first aid	maggiirag

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 No addit

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.

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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

Hygiene measures

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

Do not eat, drink or smoke when using this product. Always wash hands after handling the

should be handled by specialists only. Carefully comply with the instructions for use.

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.

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

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# 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 avail

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

#### 9.2. Other information

Oxidising properties

Explosive limits

Gas group Compressed gas

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

ground level.

Not applicable.

No data available

# **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)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Skin corrosion/irritation

Serious eye damage/irritation

Not classified
pH: Not applicable
pH: Not applicable
pH: Not applicable

Respiratory or skin sensitisation

Germ cell mutagenicity

Not classified

Carcinogenicity

Not classified

Reproductive toxicity

Not classified

STOT-single exposure

STOT-repeated exposure

Aspiration hazard

Not classified

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-

Not classified

term (chronic)

# carbon dioxide, liquefied, under pressure (124-38-9)LC50 fish 135 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.	

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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	ccumulative 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 n	ame			
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 descripti	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	

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ADR	IMDG	IATA	RID	
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				

#### 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

Transport category (ADR)
Orange plates

20 1956

#### - 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, 662Limited quantities (RID)120mlPacking instructions (RID)P200Carriage prohibited (RID)No

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

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# **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:

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	Contains gas under pressure; may explode if heated.		
H402	Harmful to aquatic life		

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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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