

# CFR 1

## Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations

Issue date: 05/08/2022

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Version: 22.1

### SECTION 1: Product identifier

#### 1.1. GHS Product identifier

Product form	Mixture
Trade name	CFR 1
Product code	BU Fire Protection



#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

No additional information available

#### 1.4. Details of manufacturer or importer

**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](mailto:serviceaustralia@hilti.com)

**Department issuing data specification sheet:**

Hilti AG  
Feldkircherstraße 100  
9494 Schaan - Liechtenstein  
T +423 234 2111  
[chemicals.hse@hilti.com](mailto:chemicals.hse@hilti.com)

#### 1.5. Emergency phone number

Emergency number +61 2 8748 1000

### SECTION 2: Hazard identification

#### 2.1. Classification of the hazardous chemical

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

Aerosol, Category 1	H222;H229
Serious eye damage/eye irritation, Category 2A	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336

#### 2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU)



Signal word (GHS AU)

Danger

Contains

Acetone (40 – 60 %); ethyl acetate (10 – 25 %)

Hazard statements (GHS AU)

H222 - Extremely flammable aerosol  
H229 - Pressurised container: May burst if heated  
H319 - Causes serious eye irritation

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Precautionary statements (GHS AU)	<p>H336 - May cause drowsiness or dizziness</p> <p>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P211 - Do not spray on an open flame or other ignition source.</p> <p>P251 - Do not pierce or burn, even after use.</p> <p>P261 - Avoid breathing spray.</p> <p>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.</p>
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### 2.3. Other hazards which do not result in classification

No additional information available

## SECTION 3: Composition and information on ingredients

Name	CAS-No.	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
Acetone	67-64-1	40 – 60	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
ethyl acetate	141-78-6	10 – 25	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
isobutane	75-28-5	< 25	Flam. Gas 1A, H220
propane	74-98-6	< 10	Flam. Gas 1A, H220
butane	106-97-8	< 10	Flam. Gas 1A, H220

## SECTION 4: First aid measures

### 4.1. Description of necessary first-aid measures

First-aid measures general	Call a poison center or a doctor if you feel unwell. 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	Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
First-aid measures after skin contact	If skin irritation occurs: Get medical advice/attention. Wash skin with plenty of water. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

### 4.2. Symptoms caused by exposure

Symptoms/effects after inhalation	May cause drowsiness or dizziness.
Symptoms/effects after eye contact	Eye irritation. Causes serious eye irritation.

### 4.3. Medical attention and special treatment

Other medical advice or treatment	Treat symptomatically.
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## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water spray. Dry powder. Carbon dioxide. Sand. Alcohol resistant foam.
Unsuitable extinguishing media	Do not use a heavy water stream.

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### 5.2. Specific hazards arising from the chemical

Fire hazard	Extremely flammable aerosol.
Explosion hazard	Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide. Vapours may form explosive mixture with air.

### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures	Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing spray. Avoid contact with skin and eyes. Evacuate unnecessary personnel.
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#### 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". Equip cleanup crew with proper protection. Avoid breathing dust/fume/gas/mist/vapours/spray.
Emergency procedures	Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### 6.3. Methods and materials for containment and cleaning up

Methods for cleaning up	Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing spray. Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash hands, forearms and face thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 – 25 °C



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Environmental exposure controls

Avoid release to the environment.

Other information

Do not eat, drink or smoke during use.

### SECTION 9: Physical and chemical properties

Physical state	Liquid
Appearance	Aerosol.
Colour	Colourless
Odour	characteristic
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point / Freezing point	Melting point : Not applicable
Boiling point	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	Vapour pressure : 2500 – 2900 hPa at 20 °C
Relative density	No data available
Density	Density : 0.74 – 0.76 g/cm <sup>3</sup>
Solubility	Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	No data available
Explosive properties	Pressurised container: May burst if heated.
Explosive limits	No data available
Minimum ignition energy	No data available
Fat solubility	No data available

### SECTION 10: Stability and reactivity

Reactivity	Extremely flammable aerosol. Pressurised container: May burst if heated.
Chemical stability	Stable under normal conditions. Not established.
Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use. Not established.
Conditions to avoid	Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition. Direct sunlight. Extremely high or low temperatures.
Incompatible materials	Strong acids. Strong bases.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

### SECTION 11: Toxicological information

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

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<b>Acetone (67-64-1)</b>	
LD50 oral rat	5800 mg/kg (Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 15800 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	76 mg/l (4 h, Rat, Female, Weight of evidence, Inhalation (vapours))

<b>ethyl acetate (141-78-6)</b>	
LD50 oral rat	10200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 20000 mg/kg bodyweight (24 hour cuff method, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))

Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Causes serious eye irritation.
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Vaporizer	Aerosol

Potential adverse human health effects and symptoms      Based on available data, the classification criteria are not met

## 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.

<b>Acetone (67-64-1)</b>	
LC50 - Fish [1]	6210 – 8120 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Measured concentration)
Partition coefficient n-octanol/water (Log Pow)	-0.23 (Test data)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.374 – 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

<b>ethyl acetate (141-78-6)</b>	
LC50 - Fish [1]	230 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
BCF - Fish [1]	30 (3 day(s), Leuciscus idus, Static renewal, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)

### 12.2. Persistence and degradability

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Persistence and degradability	Not established.

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<b>isobutane (75-28-5)</b>	
Not rapidly degradable	
<b>propane (74-98-6)</b>	
Not rapidly degradable	
<b>Acetone (67-64-1)</b>	
Persistence and degradability	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.92 g O <sub>2</sub> /g substance
ThOD	2.2 g O <sub>2</sub> /g substance
<b>ethyl acetate (141-78-6)</b>	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.69 g O <sub>2</sub> /g substance
ThOD	1.82 g O <sub>2</sub> /g substance
<b>butane (106-97-8)</b>	
Not rapidly degradable	

### 12.3. Bioaccumulative potential

<b>CFR 1</b>	
Bioaccumulative potential	Not established.
<b>Acetone (67-64-1)</b>	
Partition coefficient n-octanol/water (Log Pow)	-0.23 (Test data)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.374 – 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.
<b>ethyl acetate (141-78-6)</b>	
BCF - Fish [1]	30 (3 day(s), Leuciscus idus, Static renewal, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

### 12.4. Mobility in soil

<b>Acetone (67-64-1)</b>	
Surface tension	23.3 mN/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	-0.23 (Test data)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	See section 12.1 on ecotoxicology 0.374 – 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
<b>ethyl acetate (141-78-6)</b>	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	0.68 (Experimental value, EPA OPPTS 830.7560, 25 °C)
Ecology - soil	Low potential for adsorption in soil.

### 12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

<b>CFR 1</b>	
Fluorinated greenhouse gases	False
<b>isobutane (75-28-5)</b>	
Fluorinated greenhouse gases	False
<b>propane (74-98-6)</b>	
Fluorinated greenhouse gases	False

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<b>Acetone (67-64-1)</b>	
Fluorinated greenhouse gases	False
<b>ethyl acetate (141-78-6)</b>	
Fluorinated greenhouse gases	False
<b>butane (106-97-8)</b>	
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. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Ecology - waste materials	Avoid release to the environment.

### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>			
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS
Transport document description			
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>			
2.1	2.1	2.1	2.1
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
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)	5F
Special provisions (ADR)	190, 327, 344, 625
Limited quantities (ADR)	1I
Packing instructions (ADR)	P207, LP02
Mixed packing provisions (ADR)	MP9
Transport category (ADR)	2
Tunnel restriction code (ADR)	D



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### Transport by sea

Special provisions (IMDG)	63, 190, 277, 327, 344, 959
Limited quantities (IMDG)	SP277
Packing instructions (IMDG)	P207, LP02
EmS-No. (Fire)	F-D
EmS-No. (Spillage)	S-U
Stowage category (IMDG)	None
MFAG-No	126

### Air transport

PCA packing instructions (IATA)	203
PCA max net quantity (IATA)	75kg
CAO packing instructions (IATA)	203
Special provisions (IATA)	A145, A167, A802

### Rail transport

Special provisions (RID)	190, 327, 344, 625
Limited quantities (RID)	1L
Packing instructions (RID)	P207, LP02

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

Not applicable

### 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

#### Australian Industrial Chemicals Introduction Scheme (AICIS)

Australian Inventory of Industrial Chemicals (AICIS Inventory) status All the chemicals contained in this product are listed introductions

### 15.2. International agreements

No additional information available

## SECTION 16: Other information

Indication of changes:  
Modified.

Data sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Revision date

05/08/2022

Other information

None.

Classification:

Aerosol 1	H222;H229
Eye Irrit. 2A	H319
STOT SE 3	H336

Full text of H-statements:

Aerosol 1	Aerosol, Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation, Category 2A
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

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H220	Extremely flammable gas
H225	Highly flammable liquid and vapour
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness

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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.*