



Hazardous according to criteria of Australian Safety and Compensation Council

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** CFR 1 / CF 100 R1
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use** Building and construction work
- **Application of the substance / the mixture**
Cleaning agent/ Cleaner
Construction chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Hilti (Aust.) Pty. Ltd.
Level 5, 1G Homebush Bay Drive
Rhodes N.S.W. 2138
Australia
Phone: 131 292
Fax: 1300 135 042
Email: serviceaustralia@hilti.com
- **Informing department:**
chemicals.hse@hilti.com
see section 16
- **Emergency telephone number:**
Tox Info Suisse - 24 h Service
Tel.: 0041 / 44 251 51 51 (international)
- Hilti (Aust.) Pty. Ltd.
Phone: 131 292
Fax: 1300 135 042

2 Hazards identification

- **Classification of the substance or mixture**
Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
Eye Irrit. 2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.
- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**

GHS02 GHS07
- **Signal word** Danger
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterisation:** Mixtures
- **Description:** Solvent mixture.

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Dangerous components:

CAS: 67-64-1 EINECS: 200-662-2	acetone	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	25-50%
CAS: 75-28-5 EINECS: 200-857-2	isobutane	Flam. Gas 1, H220; Press. Gas C, H280	10-25%
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied	Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%

· **Additional information** For the wording of the listed risk phrases refer to section 16.

4 First aid measures**Description of first aid measures**

· **General information** Instantly remove any clothing soiled by the product.

After inhalation

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion. Move to fresh air in case of accidental inhalation of vapours. Consult a doctor after significant exposure.

After skin contact

Instantly wash with water and soap and rinse thoroughly. If skin irritation persist, call a physician.

If skin irritation continues, consult a doctor.

· **After eye contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After swallowing

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Instantly call for doctor.

Information for doctor

· **Most important symptoms and effects, both acute and delayed**

Headache

Dazed

Sickness

· **Danger** Condition may deteriorate with alcohol consumption.

· **Indication of any immediate medical attention and special treatment needed** No further relevant information available.

5 Firefighting measures**Extinguishing media**

· **Suitable extinguishing agents** Water spray, carbon dioxide (CO₂), carbon dioxide blanket, foam, or dry powder.

· **For safety reasons unsuitable extinguishing agents** Water with full jet.

· **Special hazards arising from the substance or mixture** Burning produces irritant fumes

Advice for firefighters**Protective equipment:**

In the event of fire, wear self contained breathing apparatus

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

· **Additional information** Cool endangered containers with water spray jet.

6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.

Keep away from ignition sources

· **Environmental precautions:** Do not allow product to reach sewage system or water bodies.

Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage**Handling****Precautions for safe handling**

Keep away from heat and direct sunlight.

Provide sufficient air exchange and/or exhaust in work rooms. When using, do not eat, drink or smoke. Ingestion, exposure to skin and eyes and inhalation of any general vapours should be avoided.

Information about protection against explosions and fires:

Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use.

Do not spray on flames or red-hot objects.

Fumes can combine with air to form an explosive mixture.

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Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

· **Conditions for safe storage, including any incompatibilities**

· **Storage**

· **Requirements to be met by storerooms and containers:**

Do not freeze. Store in original container

Keep out of reach of children. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from flammable substances.

· **Further information about storage conditions:**

Protect from heat and direct sunlight.

Do not seal container gastight.

Store in cool, dry conditions in well sealed containers.

Store container in a well ventilated position.

· **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

67-64-1 acetone

NES (Australia) Short-term value: 2375 mg/m³, 1000 ppm

Long-term value: 1185 mg/m³, 500 ppm

IOELV (European Union) 1210 mg/m³, 500 ppm

67-63-0 propan-2-ol

NES (Australia) Short-term value: 1230 mg/m³, 500 ppm

Long-term value: 983 mg/m³, 400 ppm

74-98-6 propane liquefied

NES (Australia) Asphyxiant

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Exposure controls**

· **Personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures should be adhered to general rules for handling chemicals.

Wash hands during breaks and at the end of the work.

Avoid contact with the skin.

Do not eat, drink or smoke while working.

· **Breathing equipment:**

Not necessary if room is well-ventilated.

Use breathing protection in case of insufficient ventilation.

· **Recommended filter device for short term use:** Filter AX

· **Protection of hands:**



Protective gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

EN 374

· **Material of gloves**

Nitrile rubber, NBR

Fluorocarbon rubber (Viton)

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed safety glasses.

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· **Body protection:**



Protective work clothing.

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· Form:	Aerosol
· Colour:	Colourless
· Odour:	Solvent-like
· Odour threshold:	Not determined

· **pH-value:** Not determined

· **Change in condition**

· Melting point/Melting range:	Not applicable
· Boiling point/Boiling range:	Not applicable, as aerosol

· **Flash point:** Not applicable, as aerosol

· **Ignition temperature:** > 230 °C

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/steam mixtures is possible.

· **Critical values for explosion:**

· Lower:	1.5 Vol %
· Upper:	14.3 Vol %

· **Vapour pressure at 20 °C:** 2.5-2.9 bar

· **Density at 20 °C** 0.75 g/cm³ (DIN 51757)

· **Relative density** Not determined

· **Vapour density** Not determined

· **Evaporation rate** Not determined

· **Solubility in / Miscibility with**

· **Water:** Partly miscible

· **Partition coefficient (n-octanol/water):** Not determined

· **Viscosity:**

· **dynamic:** Not determined

· **kinematic:** Not determined

· **Solvent separation test** Not determined

· **Other information** No further relevant information available.

10 Stability and reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions**

Forms explosive gas mixture with air

Danger of bursting

· **Conditions to avoid** Protect from heat and direct sunlight.

· **Incompatible materials:** No further relevant information available.

· **Hazardous decomposition products:** Danger of toxic pyrolysis products

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity**

· **LD/LC50 values that are relevant for classification:**

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rbt)
Inhalative	LC50/4h	>20 mg/l (rat)

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67-63-0 propan-2-ol

Oral	LD50	4570 - 5840 mg/kg (rat)
Dermal	LD50	12800 - 13400 mg/kg (rabbit)
Inhalative	LC50/4h	30 - 46.5 mg/l (rat)

- **Primary irritant effect:**
- **Serious eye damage/irritation** Irritant effect.
- **Respiratory or skin sensitisation** No sensitizing effect known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Irritant
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** Limited evidence of a carcinogenic effect.


12 Ecological information

- **Toxicity**
 - **Aquatic toxicity:**
- | | | |
|----------------------------|----------------------------|--|
| 67-64-1 acetone | | |
| EC50/48h | 7500 mg/l (Algae) | |
| | 12600 mg/l (magna daphnia) | |
| EC50/96h | 6500 mg/l (fish) | |
| 67-63-0 propan-2-ol | | |
| EC50/48h | 9870 mg/l (fish) | |
- **Persistence and degradability** No further relevant information available.
 - **Behaviour in environmental systems:**
 - **Bioaccumulative potential** Does not accumulate in organisms
 - **Mobility in soil** No further relevant information available.
 - **Ecotoxicological effects:** Not determined
 - **Additional ecological information:**
 - **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
 - **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
 - **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation**
Full or only partially emptied cartridges must be disposed of as special waste in accordance with official regulations. Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
 - **Waste disposal key number:** Abfallschlüssel (CH): 3050
- | | |
|---------------------------------|---|
| European waste catalogue | |
| 14 06 03* | other solvents and solvent mixtures |
| 16 05 04* | gases in pressure containers (including halons) containing dangerous substances |
- **Uncleaned packagings:**
 - **Recommendation:**
Disposal must be made according to official regulations.
Dispose of packaging according to regulations on the disposal of packagings.


14 Transport information

- **UN-Number**
 - **ADG, IMDG, IATA** UN1950
 - **UN proper shipping name**
 - **ADG** 1950 AEROSOLS
 - **IMDG** AEROSOLS
 - **IATA** AEROSOLS, flammable
 - **Transport hazard class(es)**
 - **ADG**
- 
- **Class** 2 5F Gases.

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· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· Packing group	Void
· ADG, IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Gases.
· Kemler Number:	Void
· EMS Number:	F-D,S-U
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADG	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D
· IATA	
· Remarks:	Packing Instruction No. 203
· UN "Model Regulation":	UN1950, AEROSOLS, 2.1

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· Australian Inventory of Chemical Substances

All ingredients are listed.

· Standard for the Uniform Scheduling of Medicines and Poisons

67-64-1 | acetone

S5

· Chemical safety assessment: not required.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· Department issuing data specification sheet:

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Quality/Safety/Environment

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· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Gas 1: Flammable gases, Hazard Category 1

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas C: Gases under pressure: Compressed gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

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Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.08.2015

Version number 20

Revision: 18.08.2015

Trade name: CFR 1 / CF 100 R1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

· * **Data compared to the previous version altered.**

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