

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 21/02/2025 Revision date: 21/02/2025 Supersedes version of: 22/11/2021

Version: 2.0

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

1.1. Product identifier

Product form Trade name UFI Product code Vaporizer Mixture CF 125-50 / CF 125-5W50 / CF 126 / CF-I 750 B2 / CF-I 750/B2-SV / CF ISO 750 Y1CX-H0GC-YRNR-A9MJ BU Fire Protection Foam Aerosol

Department issuing data specification sheet

product.compliance-fire.protection@hilti.com

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category Industrial/Professional use spec Professional use For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Hilti (Fastening Systems) Limited Unit C4 North City Business Park, Finglas IE 11 Dublin Irland T +353 188 64101 1850-287 387 Call Save, F +353 183 03569 iesales@hilti.com

1.4. Emergency telephone number

Emergency number

Emergency CONTACT (24-Hour-Number): GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

Hilti AG

Liechtenstein T +423 234 2111

Feldkircherstraße 100 FL 9494 Schaan

+353 188 64101 1850-287 387 Call Save

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]		
Aerosol, Category 1	H222;H229	
Skin corrosion/irritation, Category 2	H315	
Serious eye damage/eye irritation, Category 2	H319	



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Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Single exposure, Category 3, Respiratory	H335
tract irritation Specific target organ toxicity – Repeated exposure, Category 2 Full text of H- and EUH-statements: see section 16	H373

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/20	08 [CLP]
Hazard pictograms (CLP)	
	GHS02 GHS07 GHS08
Signal word (CLP)	Danger
Contains	4,4'-diphenylmethanediisocyanate, isomeres and homologues; Reaction products of phosphoryl trichloride and 2-methyloxirane
Hazard statements (CLP)	H222 - Extremely flammable aerosol.
	H229 - Pressurised container: May burst if heated.
	H315 - Causes skin irritation.
	H317 - May cause an allergic skin reaction.
	H319 - Causes serious eye irritation.
	H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335 - May cause respiratory irritation.
	H351 - Suspected of causing cancer.
	H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements (CLP)	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.
	P260 - Do not breathe spray.
	P280 - Wear protective gloves, protective clothing, eye protection.
	P308+P313 - IF exposed or concerned: Get medical advice/attention.
	P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Extra phrases	As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
propane (74-98-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
Dimethyl ether (115-10-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	
isobutane (75-28-5)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	



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Component		
Reaction products of phosphoryl trichloride and 2-	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
methyloxirane (1244733-77-4)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
Reaction products of phosphoryl trichloride and 2- methyloxirane (1244733-77-4)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
Dimethyl ether (115-10-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
isobutane (75-28-5)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	
propane (74-98-6)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
4,4'-diphenylmethanediisocyanate, isomeres and homologues	CAS-No.: 9016-87-9 EC-No.: 618-498-9	10 – 25	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373



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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Reaction products of phosphoryl trichloride and 2- methyloxirane	CAS-No.: 1244733-77-4 EC-No.: 807-935-0 REACH-no: 01-2119486772- 26	10 – 25	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Carc. 2, H351 Aquatic Chronic 3, H412
Dimethyl ether (Propellant gas (Aerosol))	CAS-No.: 115-10-6 EC-No.: 204-065-8 EC Index-No.: 603-019-00-8 REACH-no: 01-2119472128- 37	5 – 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
isobutane (Propellant gas (Aerosol))	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395- 27	5 – 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
propane (Propellant gas (Aerosol))	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944- 21	2.5 – 5	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
4,4'-diphenylmethanediisocyanate, isomeres and homologues	CAS-No.: 9016-87-9 EC-No.: 618-498-9	(0.1 ≤ C < 100) Resp. Sens. 1, H334 (5 ≤ C < 100) Skin Irrit. 2, H315 (5 ≤ C < 100) Eye Irrit. 2, H319 (5 ≤ C < 100) STOT SE 3, H335	

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case. Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures	
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
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	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and effe	cts, both acute and delayed
Symptoms/effects after inhalation	Danger of serious damage to health by prolonged exposure through inhalation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.
Symptoms/effects after skin contact	Causes skin irritation.
Symptoms/effects after eye contact	Causes serious eye irritation.

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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	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
5.2. Special hazards arising from the substa	nce or mixture
Fire hazard	Extremely flammable aerosol.
Explosion hazard	Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	Toxic fumes may be released. Vapours may form explosive mixture with air.
5.3. Advice for firefighters	
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 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	Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	Equip cleanup crew with proper protection.	
Emergency procedures	Ventilate area.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.		
C.O. Matheda and waterial for containment and alconing on		

6.3. Methods and material for containment and cleaning up		
Methods for cleaning up	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.	
	Collect spillage. Store away from other materials.	
Other information	Dispose of materials or solid residues at an authorized site. After curing, the product can be	
	disposed of with household waste.	

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

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. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. May form flammable/explosive vapour-air mixture. 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. Avoid breathing dust/fume/gas/mist/vapours/spray.



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Hygiene measures	Wash hands, forearms and face thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.
7.2. Conditions for safe storage, including a	ny incompatibilities
Storage conditions	Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
Incompatible products	Strong bases. Strong acids.
Incompatible materials	Sources of ignition. Direct sunlight.
Storage temperature	5 – 25 °C
Heat and ignition sources	Keep away from heat and direct sunlight. Keep away from ignition sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. National occupational exposure and biological limit values

propane (74-98-6)		
Ireland - Occupational Exposure Limits		
Local name	Aliphatic hydrocarbon gases Alkanes (C1-C3): Propane	
Remark	Asphx. (Gaseous chemical substances which may not produce significant physiological effects in the exposed employee, but when present in high concentrations will act as simple asphyxiants)	
Regulatory reference	Chemical Agents Code of Practice 2021	
Dimethyl ether (115-10-6)		
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Dimethylether	
IOEL TWA	1920 mg/m ³	
	1000 ppm	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
Ireland - Occupational Exposure Limits		
Local name	Dimethyl ether	
OEL TWA	1920 mg/m³	
	1000 ppm	
Remark	IOELV (Indicative Occupational Exposure Limit Values)	
Regulatory reference	Chemical Agents Code of Practice 2021	
isobutane (75-28-5)		
Ireland - Occupational Exposure Limits		
Local name	Butane, all isomers: Isobutane	
OEL STEL	1000 ppm	
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values)	



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isobutane (75-28-5)		
Regulatory reference	Chemical Agents Code of Practice 2021	
8.1.2. Recommended monitoring procedures No additional information available		
8.1.3. Air contaminants formed No additional information available		
8.1.4. DNEL and PNEC No additional information available		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Wear suitable gloves tested to EN374. Suitable for short-term work or as a splash guard: Nitrile rubber gloves (> 0.1 mm). In case of permanent product contact:

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	>0,35mm		
Disposable gloves	Butyl rubber	6 (> 480 minutes)	>0,35mm		

8.2.2.3. Respiratory protection

Respiratory protection:

Not necessary with sufficient ventilation. Ensure good ventilation of the work station. Open windows during application to ensure natural ventilation. If the occupational exposure limit is exceeded: Wear appropriate mask. (e.g. gas filter type A1-P2 according to EN 14387)



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8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

As from 24 August 2023 adequate training is required before industrial or professional use,www.feica.eu/PUinfo



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

5.1. Information on basic physical and chem	
Physical state	Liquid
Colour	Manila.
Appearance	Aerosol.
Odour	ether-like odour.
Odour threshold	Not available
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flammability	Non flammable.
Explosive properties	Pressurised container: May burst if heated.
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	Not applicable
Auto-ignition temperature	Not available
Decomposition temperature	Not available
рН	Not available
Viscosity, kinematic	Not available
Solubility	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	5100 hPa
Vapour pressure at 50°C	Not available
Density	1.049 g/cm ³
Relative density	Not available
Relative vapour density at 20°C	Not available
Particle characteristics	Not applicable

25 %

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients

9.2.2. Other safety characteristics

No additional information available



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SECTION 10: Stability and reactivity

10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as define	ed in Regulation (EC) No 1272/2008		
Acute toxicity (oral)	Not classified.		
Acute toxicity (dermal)	Not classified		
Acute toxicity (inhalation)	Not classified		
4,4'-diphenylmethanediisocyanate, isomeres and	homologues (9016-87-9)		
LD50 oral rat	> 10000 mg/kg (Rat, Literature study, Oral)		
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Literature study, Dermal)		
LD50 dermal	9400 mg/kg		
LC50 Inhalation - Rat	0.49 mg/l		
propane (74-98-6)			
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))		
isobutane (75-28-5)	isobutane (75-28-5)		
LC50 Inhalation - Rat [ppm]	> 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gases))		
Skin corrosion/irritation	Causes skin irritation.		
Serious eye damage/irritation	Causes serious eye irritation.		
Respiratory or skin sensitisation	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an		
	allergic skin reaction.		
Germ cell mutagenicity	Not classified		
Carcinogenicity	Suspected of causing cancer.		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)			
IARC group	3 - Not classifiable		
Reproductive toxicity	Not classified		
STOT-single exposure	May cause respiratory irritation.		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)			
STOT-single exposure	May cause respiratory irritation.		



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STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)			
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not classified		
CF 125-50 / CF 125-5W50 / CF 126 / CF-I 750 B2 / CF-I 750/B2-SV / CF ISO 750			
Vaporizer	Aerosol		

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information				
12.1. Toxicity				
Hazardous to the aquatic environment, short-term	Not classified			
(acute) Hazardous to the aquatic environment, long-term (chronic)	Not classified			
4,4'-diphenylmethanediisocyanate, isomeres and h	omologues (9016-87-9)			
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)			
propane (74-98-6)				
EC50 96h - Algae [1]	12 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)			
Dimethyl ether (115-10-6)				
LC50 - Fish [1]	> 4100 mg/l (NEN 6504: Water - Determination of toxicity with Poecilia reticulata, 96 h, Poecilia reticulata, Semi-static system, Fresh water, Experimental value, Lethal)			
EC50 - Crustacea [1]	> 4400 mg/l (NEN 6501: Water - Determination of toxicity with Daphnia magna, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Lethal)			
EC50 96h - Algae [1]	154.9 mg/l (ECOSAR v1.00, Algae, QSAR, Estimated value)			
isobutane (75-28-5)	isobutane (75-28-5)			
EC50 96h - Algae [1]	8.57 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR)			
12.2. Persistence and degradability				
4,4'-diphenylmethanediisocyanate, isomeres and h	omologues (9016-87-9)			
Persistence and degradability	Not readily biodegradable in water.			
propane (74-98-6)				
Persistence and degradability	Readily biodegradable in water.			
Dimethyl ether (115-10-6)				
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.			
isobutane (75-28-5)				
Persistence and degradability	Readily biodegradable in water.			



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12.3. Bioaccumulative potential		
4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)		
BCF - Fish [1]	268.1 l/kg (BCFBAF v3.01, Estimated value, Fresh weight)	
Partition coefficient n-octanol/water (Log Pow)	10.46 (Calculated, KOWWIN)	
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).	
propane (74-98-6)		
Partition coefficient n-octanol/water (Log Pow)	1.1 – 2.8 (Experimental value, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Dimethyl ether (115-10-6)		
Partition coefficient n-octanol/water (Log Pow)	0.1 (Experimental value)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
isobutane (75-28-5)		
Partition coefficient n-octanol/water (Log Pow)	1.09 – 2.8 (Experimental value, 20 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

12.4. Mobility in soil

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)		
Surface tension	No data available in the literature	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	9.078 – 10.597 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Adsorbs into the soil.	
propane (74-98-6)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	
Dimethyl ether (115-10-6)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	
isobutane (75-28-5)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available



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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. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. Avoid release to the environment. Ecological information European List of Waste (LoW, EC 2000/532) 08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances 08 05 01* - waste isocyanates HP Code HP3 - "Flammable:" - flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; - flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; - flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; - flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; - water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; - other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration. HP7 - "Carcinogenic:" waste which induces cancer or increases its incidence HP4 - "Irritant - skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.1. UN number or ID number					
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950	
14.2. UN proper shipping n	14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS	
Transport document descr	iption				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1	
14.3. Transport hazard class(es)					
2.1	2.1	2.1	2.1	2.1	



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ADR	IMDG	ΙΑΤΑ	ADN	RID
		2		
4.4. Packing group	· · · ·	·	¥	
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
4.5. Environmental hazar	ds			
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)	5F
Special provisions (ADR)	190, 327, 344, 625
Limited quantities (ADR)	11
Packing instructions (ADR)	P207, LP02
Mixed packing provisions (ADR)	MP9
Transport category (ADR)	2
Tunnel restriction code (ADR)	D
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
Inland waterway transport	
Classification code (ADN)	5F
Special provisions (ADN)	19, 327, 344, 625
Limited quantities (ADN)	1 L
Excepted quantities (ADN)	E0
Equipment required (ADN)	PP, EX, A
Ventilation (ADN)	VE01, VE04
Number of blue cones/lights (ADN)	1
Rail transport	
Special provisions (RID)	190, 327, 344, 625
Limited quantities (RID)	1L



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Packing instructions (RID)

P207, LP02

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)

Reference code Applicable on		
74.	4,4'-diphenylmethanediisocyanate, isomeres and homologues	

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
3.2		Modified	



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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		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
ED	Endocrine disrupting properties		
EN	European Standard		
IARC	International Agency for Research on Cancer		
ΙΑΤΑ	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
IOELV	Indicative Occupational Exposure Limit Value		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
N.O.S.	Not Otherwise Specified		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
vPvB	Very Persistent and Very Bioaccumulative		
WGK	Water Hazard Class		
VOC	Volatile Organic Compounds		
SDS	Safety Data Sheet		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
PNEC	Predicted No-Effect Concentration		
РВТ	Persistent Bioaccumulative Toxic		
OEL	Occupational Exposure Limit		



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Abbreviations and acronyms:		
OECD	Organisation for Economic Co-operation and Development	
COD	Chemical oxygen demand (COD)	
ThOD	Theoretical oxygen demand (ThOD)	
TRGS	Technical Rules for Hazardous Substances	
TLM	Median Tolerance Limit	
STP	Sewage treatment plant	

Full text of H- and EUH-statements:		
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aerosol 1	Aerosol, Category 1	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Carc. 2	Carcinogenicity, Category 2	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Gas 1A	Flammable gases, Category 1A	
H220	Extremely flammable gas.	
H222	Extremely flammable aerosol.	
H229	Pressurised container: May burst if heated.	
H280	Contains gas under pressure; may explode if heated.	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H335	May cause respiratory irritation.	
H351	Suspected of causing cancer.	
H373	May cause damage to organs through prolonged or repeated exposure.	
H412	Harmful to aquatic life with long lasting effects.	
Press. Gas (Comp.)	Gases under pressure : Compressed gas	
Press. Gas (Liq.)	Gases under pressure : Liquefied gas	
Resp. Sens. 1	Respiratory sensitisation, Category 1	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2	



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Full text of H- and EUH-statements:			
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation		
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Aerosol 1	H222;H229	On basis of test data	
Skin Irrit. 2	H315	Calculation method	
Eye Irrit. 2	H319	Calculation method	
Resp. Sens. 1	H334	Calculation method	
Skin Sens. 1	H317	Calculation method	
Carc. 2	H351	Calculation method	
STOT SE 3	H335	Calculation method	
STOT RE 2	H373	Calculation method	

SDS_EU_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.