

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 18/11/2024 Revision date: 18/11/2024 Supersedes version of: 28/09/2022

Version: 22.2

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

1.1. Product identifier

Product form Mixture
Trade name CFR 1

UFI 01U2-X1Y2-URNY-8020
Product code BU Fire Protection
Vaporizer Aerosol



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

1.2.1. Relevant identified uses

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

Use of the substance/mixture Spray cleaners

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

Department issuing data specification sheet

Hilti AG

Feldkircherstraße 100 FL 9494 Schaan Liechtenstein T +423 234 2111

product.compliance-fire.protection@hilti.com

1.4. Emergency telephone number

Emergency number Emergency CONTACT (24-Hour-Number):
GBK GmbH Global Regulatory Compliance

+49 (0)6132-84463

+353 188 64101 1850-287 387 Call Save

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



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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
Serious eye damage/eye irritation, Category 2 H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness. Causes serious eye irritation.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)

(1)

GHS02

GHS07

Signal word (CLP) Dange

Contains Acetone; ethyl acetate

Hazard statements (CLP) H222 - Extremely flammable aerosol.

H229 - Pressurised container: May burst if heated.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

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.

P261 - Avoid breathing 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.

EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

EUH-statements

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

Component	
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
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
Acetone (67-64-1)	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
ethyl acetate (141-78-6)	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
butane (106-97-8)	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

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 %



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Component	
Acetone (67-64-1)	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
ethyl acetate (141-78-6)	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
butane (106-97-8)	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]
Acetone	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330-	40 – 60	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
ethyl acetate	CAS-No.: 141-78-6 EC-No.: 205-500-4 EC Index-No.: 607-022-00-5 REACH-no: 01-2119475103-	10 – 25	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
isobutane	CAS-No.: 75-28-5 EC-No.: 200-857-2 EC Index-No.: 601-004-00-0 REACH-no: 01-2119485395- 27	< 25	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
propane	CAS-No.: 74-98-6 EC-No.: 200-827-9 EC Index-No.: 601-003-00-5 REACH-no: 01-2119486944- 21	< 10	Flam. Gas 1A, H220 Press. Gas (Liq.), H280



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Name	Product identifier	Classification according to Regulation (EC) No. 1272/2008 [CLP]
butane	CAS-No.: 106-97-8 EC-No.: 203-448-7 EC Index-No.: 601-004-00-0	Flam. Gas 1A, H220 Press. Gas (Liq.), H280

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 Г	Desci	rintion	of first	aid	measures
4.	I. L	ノヒろし		OI III SL	aıu	illeasures

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

nossible)

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. Most important symptoms and effects, both acute and delayed

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

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 Water spray. Dry powder. Carbon dioxide. Sand. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

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. 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 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.



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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.

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 material 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.

Other information Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. 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. 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

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

isobutane (75-28-5)			
Ireland - Occupational Exposure Limits			
Local name	Butane, all isomers: Isobutane		
OEL STEL	1000 ppm		



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isobutane (75-28-5)	
Regulatory reference	Chemical Agents Code of Practice 2021
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
Acetone (67-64-1)	
EU - Indicative Occupational Exposure Limit (IOE	L)
Local name	Acetone
IOEL TWA	1210 mg/m³
	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Ireland - Occupational Exposure Limits	
Local name	Acetone
OEL TWA	1210 mg/m³
	500 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
Ireland - Biological limit values	
Local name	Acetone
BMGV	50 mg/l Parameter: acetone - Medium: urine - Sampling time: End of shift - Notations: Ns (Non-specific)
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
ethyl acetate (141-78-6)	
EU - Indicative Occupational Exposure Limit (IOE	L)
Local name	Ethyl acetate
IOEL TWA	734 mg/m³
	200 ppm
IOEL STEL	1468 mg/m³
	400 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Ireland - Occupational Exposure Limits	
Local name	Ethyl acetate
OEL TWA	734 mg/m³
	200 ppm



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ethyl acetate (141-78-6)				
OEL STEL	1468 mg/m³			
	400 ppm			
Remark	IOELV (Indicative Occupational Exposure Limit Values)			
Regulatory reference Chemical Agents Code of Practice 2021				
butane (106-97-8)				
Ireland - Occupational Exposure Limits				
Local name	Butane, all isomers: Butane			
OEL STEL	1000 ppm			
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:

Gloves. Protective clothing. Protective goggles.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection				
Туре	Field of application	Characteristics	Standard	
Safety glasses			EN 166, EN 171	

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 (> 0.2 mm). In case of permanent product contact:



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Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Butyl rubber	6 (> 480 minutes)	0,5mm		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

Ensure good ventilation of the work station. If the occupational exposure limit is exceeded: Wear appropriate mask. (e.g. gas filter type A1-P2 according to EN 14387)

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. No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid Colour Colourless. Appearance Aerosol Odour characteristic. Odour threshold Not available Melting point Not applicable Freezing point Not available Not available Boiling point

Flammability Extremely flammable aerosol.

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 pН Not available Not available Viscosity, kinematic Solubility Soluble in water. Partition coefficient n-octanol/water (Log Kow) Not available

Vapour pressure 2500 – 2900 hPa at 20 °C

Vapour pressure at 50°C

Density

0.74 – 0.76 g/cm³

Relative density

Relative vapour density at 20°C

Particle characteristics

Not available

Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients 112 %

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

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. 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.

10.5. Incompatible materials

Strong acids. Strong bases.

Skin corrosion/irritation

10.6. 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

11.1 Information on hazard	classes as defined in Regulation	(EC) No 1272/2009
11.1. Information on nazard	classes as defined in Redulation	(EC) NO 12/2/2008

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

isobutane (75-28-5)		
50 Inhalation - Rat [ppm] > 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (gase		
propane (74-98-6)		
LC50 Inhalation - Rat [ppm] > 800000 ppm (15 minutes, Rat, Male / female, Experimental value, Inhalation (ga		
Acetone (67-64-1)		
LD50 oral rat	5800 mg/kg (Rat, Female, Experimental value, Oral, 14 day(s))	
LD50 oral	6667 mg/kg	
LD50 dermal rabbit	> 15800 mg/kg bodyweight (24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))	
LD50 dermal	20000 mg/kg	
LC50 Inhalation - Rat	132 mg/l (3 h, Rat, Male, Experimental value, Inhalation (vapours))	
ethyl acetate (141-78-6)		
LD50 oral rat	10200 mg/kg bodyweight (Equivalent or similar to OECD 401, Rat, Female, Experimental value, Oral, 14 day(s))	
LD50 oral	5600 mg/kg	
LD50 dermal rabbit	> 20000 mg/kg bodyweight (24 hour cuff method, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))	
LD50 dermal	18000 mg/kg	
LC50 Inhalation - Rat (Vapours)	52.75 mg/l/4h	
butane (106-97-8)		
LC50 Inhalation - Rat [ppm]	276798.8 ppm	

Not classified



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Additional information Based on available data, the classification criteria are not met

Serious eye damage/irritation Causes serious eye irritation.

Respiratory or skin sensitisation Not classified

Additional information Based on available data, the classification criteria are not met

Germ cell mutagenicity Not classified

Additional information Based on available data, the classification criteria are not met

Carcinogenicity Not classified

Additional information Based on available data, the classification criteria are not met

Reproductive toxicity Not classified

Additional information Based on available data, the classification criteria are not met

FOT-single exposure May cause drowsiness or dizziness.		
Acetone (67-64-1)		
STOT-single exposure May cause drowsiness or dizziness.		
ethyl acetate (141-78-6)		
STOT-single exposure	May cause drowsiness or dizziness.	
STOT-repeated exposure	Not classified	
Additional information	Based on available data, the classification criteria are not met	
Aspiration hazard	Not classified	
Additional information	Based on available data, the classification criteria are not met	
CFR 1		
Vaporizer	Aerosol	

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

11.2.2. Other information

Potential adverse human health effects and symptoms

Based on available data, the classification criteria are not met

SECTION 12: Ecological information

Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term advers
	effects in the environment.
Hazardous to the aquatic environment, short-te	erm Not classified

(acute)

ErC50 algae

12.1. Toxicity

Hazardous to the aquatic environment, long-term

Not classified

(chronic) isobutane (75-28-5) 8.57 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR) EC50 96h - Algae [1] propane (74-98-6) EC50 96h - Algae [1] 12 mg/l (ECOSAR v1.00, Algae, Fresh water, QSAR) Acetone (67-64-1) LC50 - Fish [1] 6210 - 8120 mg/l (Equivalent or similar to OECD 203, 96 h, Pimephales promelas, Flowthrough system, Fresh water, Experimental value, Measured concentration) EC50 - Crustacea [1] > 12700 mg/l

> 530 mg/l 96h, Pseudokirchneriella subcapitata



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ethyl acetate (141-78-6)		
LC50 - Fish [1]	230 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)	
EC50 - Crustacea [1]	262 mg/l	
NOEC chronic crustacea	2.4 mg/l	

Not established.

CFR 1 Persistence and degradability

Persistence and degradability Readily b	oiodegradable in water.
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propane (74-98-6)

isobutane (75-28-5)

Persistence and degradability	Readily biodegradable in water.
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Acetone (67-64-1)

•	Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.43 g O ₂ /g substance
Chemical oxygen demand (COD)	1.92 g O ₂ /g substance

2.2 g O₂/g substance

ethyl acetate (141-78-6)

ThOD

Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.293 g O₂/g substance
Chemical oxygen demand (COD)	1.69 g O ₂ /g substance
ThOD	1.82 g O₂/g substance

12.3. Bioaccumulative potential

12.3. Bioaccumulative potential			
CFR 1			
Bioaccumulative potential	Not established.		
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).		
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).		
Acetone (67-64-1)			
BCF - Fish [1]	0.69 (Pisces, Literature study)		
Partition coefficient n-octanol/water (Log Pow)	-0.23 (Test data)		
Bioaccumulative potential Low potential for bioaccumulation (BCF < 500).			



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ethyl acetate (141-78-6)		
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

sobutane (75-28-5)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	
propane (74-98-6)		
Surface tension	No data available in the literature	
Ecology - soil	Not applicable (gas).	
Acetone (67-64-1)		
Surface tension	23.3 mN/m (20 °C)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.374 – 0.988 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	
ethyl acetate (141-78-6)		
Surface tension	No data available in the literature	
Ecology - soil Low potential for adsorption in soil.		

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

Additional information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

Product/Packaging disposal recommendations

Dispose of contents/container in accordance with licensed collector's sorting instructions. 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.

Ecological information Avoid release to the environment.

European List of Waste (LoW, EC 2000/532) 16 05 04* - gases in pressure containers (including halons) containing dangerous substances

15 01 10* - packaging containing residues of or contaminated by dangerous substances

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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.

HP4 - "Irritant - skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

SECTION 14: Transport information

accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID	
14.1. UN number or ID number				
UN 1950	UN 1950	UN 1950	UN 1950	
14.2. UN proper shipping name				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	
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 availa	able		<u>'</u>	

14.6. Special precautions for user

Overland transport

Classification code (ADR) 5F

190, 327, 344, 625 Special provisions (ADR)

Limited quantities (ADR) P207, LP02 Packing instructions (ADR) MP9 Mixed packing provisions (ADR) 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. 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)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

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 substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported within 24 hours.

Name			Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en



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Drug Precursors Regulation (273/2004)

Contains 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)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Acetone		67-64-1	2914 11 00	Category 3		Annex I

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Composition/information on ingredients.

Indication of changes			
Section	Changed item	Change	Comments
			general update

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		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
IOELV	Indicative Occupational Exposure Limit Value		
LC50	Median lethal concentration		



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Abbreviations and acronyms:		
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	
PBT	Persistent Bioaccumulative Toxic	
OEL	Occupational Exposure Limit	
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	

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

Other information

amending Regulation (EC) No 1907/2006. None.

Full text of H- and EUH-statements:		
Aerosol 1	Aerosol, Category 1	
EUH066	Repeated exposure may cause skin dryness or cracking.	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
Flam. Gas 1A	Flammable gases, Category 1A	
Flam. Liq. 2	Flammable liquids, Category 2	
H220	Extremely flammable gas.	
H222	Extremely flammable aerosol.	
H225	Highly flammable liquid and vapour.	
H229	Pressurised container: May burst if heated.	



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Full text of H- and EUH-statements:		
H280	Contains gas under pressure; may explode if heated.	
H319	Causes serious eye irritation.	
H336	May cause drowsiness or dizziness.	
Press. Gas (Comp.)	Gases under pressure : Compressed gas	
Press. Gas (Liq.)	Gases under pressure : Liquefied gas	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

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	
Eye Irrit. 2	H319	Calculation method	
STOT SE 3	H336	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.