

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 28/08/2023 Revision date: 28/08/2023 Version: 3.0

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

1.1. Product identifier

Product form Mixture Name GC 52

Product code **BU Direct Fastening**

Vaporizer Container fitted with a sealed spray attachment

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

1.2.1. Relevant identified uses

Industrial/Professional use spec For professional use only

Use of the substance/mixture Propellant for direct fastening tools.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier Department issuing data specification sheet

Hilti (Israel) Ltd. Hilti AG

Feldkircherstraße 100 6 Ravnitsky St. Ind. Zone Sgula FL- 9494 Schaan P.O. Box 2650 IL- 49125 Petach Tikva Liechtenstein T +423 234 2111 Israel T +972 3 930 4499 - F +972 3 930 2095

info@hilti.co.il

1.4. Emergency telephone number

Emergency number Emergency contact (24 hours per day)

GBK GmbH Global Regulatory Compliance +49 (0)6132-84463

df.hse@hilti.com

Country	Organisation/Company	Address	Emergency number	Comment
	Israel Poison Information Center Rambam Health Care Campus	6 Ha'Aliya Street 31096	+972 4 854 1900	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flammable gases, Category 1A H220 Gases under pressure: Compressed gas H280

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

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP)

GHS02

Signal word (CLP) Danger



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Precautionary statements (CLP)

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hazard statements (CLP) H220 - Extremely flammable gas.

H280 - Contains gas under pressure; may explode if heated.

P102 - Keep out of reach of children.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Do not pierce or burn, even after use.

P381 - In case of leakage, eliminate all ignition sources.

P403 - Store in a well-ventilated place.

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

2.3. Other hazards

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

Component				
but-1-ene (106-98-9)	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			
propene (115-07-1)	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			
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			
Polyethylene glycol (25322-68-3)	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 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 at a concentration equal to or greater than 0,1 %

Component	
but-1-ene(106-98-9)	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
propene(115-07-1)	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
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
Polyethylene glycol(25322-68-3)	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



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according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
but-1-ene	CAS-No.: 106-98-9 EC-No.: 203-449-2 EC Index-No.: 601-012-00-4	40 - 60	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
propene	CAS-No.: 115-07-1 EC-No.: 204-062-1 EC Index-No.: 601-011-00-9	25 - 40	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	5 - 10	Flam. Gas 1A, H220 Press. Gas (Comp.), H280
Polyethylene glycol	CAS-No.: 25322-68-3 EC-No.: 500-038-2	1 - 3	Not classified

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 general Take off immediately all contaminated clothing.

First-aid measures after inhalation Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact Gently wash with plenty of soap and water.

First-aid measures after eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

No additional information available

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Carbon dioxide. Water spray. Dry powder. Alcohol resistant foam.

Unsuitable extinguishing media Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Explosion hazard Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of

burns and injuries.

Hazardous decomposition products in case of fire On burning: release of (highly) toxic gases/vapours. Thermal decomposition generates :

Carbon dioxide. Carbon monoxide.

5.3. Advice for firefighters

Precautionary measures fire Fight fire remotely due to the risk of explosion.

Firefighting instructions DO NOT fight fire when fire reaches explosives. Evacuate area.

Protection during firefighting Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus.

Other information EN 12942. EN 12941.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures Evacuate area. Remove ignition sources.

6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Evacuate area. No open flames, no sparks, and no smoking.

6.1.2. For emergency responders

Protective equipment Do not attempt to take action without suitable protective equipment. Breathing apparatus.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Do not flush with water.

Other information For further information refer to section 8: "Exposure controls/personal protection". For

further information refer to section 13.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed Flammable gas. Do not pierce or burn, even after use. Keep away from heat, hot surfaces,

sparks, open flames and other ignition sources. No smoking.

Precautions for safe handling Do not spray on an open flame or other ignition source. Avoid contact with skin, eyes and

clothing. Do not breathe vapours. Prevent the build-up of electrostatic charge.

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

product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures Proper grounding procedures to avoid static electricity should be followed.

Storage conditions Keep cool. Protect from sunlight. Keep in fireproof place. Store in dry protected location to

prevent any moisture contact.

Incompatible materials Heat sources. Direct sunlight. Sources of ignition.

Storage temperature 5 – 25 °C

Heat and ignition sources Keep away from heat and direct sunlight. Keep away from ignition sources.

Information on mixed storage Do not store with DX powder cartridges.

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



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propene (115-07-1)			
EU - Biological Limit Value (BLV)			
Local name	Propylene oxide		
BLV	1.3 Parameter: N-(3-hydroxypropyl) valine - Medium: blood		
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs		

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 symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Chemical goggles or safety glasses. ISO 16321-1. EN 170

8.2.2.2. Skin protection

Skin and body protection:

When using cartridge operated tools, sufficient ear protection must be worn.

Hand protection:

In case of repeated or prolonged contact wear gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	3 (> 60 minutes)	0,12		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available



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8.2.3. Environmental exposure controls

Consumer exposure controls:

No additional information available.

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Gas Colour Colourless. Odour characteristic. Odour threshold Not available Melting point Not applicable Freezing point Not applicable Boiling point Not available

Flammability Extremely flammable aerosol.

Lower explosion limit 1.6 vol % Upper explosion limit 11.1 vol % Flash point -88.6 °C Auto-ignition temperature 287 °C Decomposition temperature Not available рΗ Not applicable Not applicable Viscosity, kinematic Solubility Not available Partition coefficient n-octanol/water (Log Kow) Not available 8300 hPa Vapour pressure Vapour pressure at 50°C Not available

0.6 g/cm³ (DIN 51757) Density Not applicable Relative density Relative vapour density at 20°C Not available

Particle characteristics Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits

9.2.2. Other safety characteristics

Gas group Gases under pressure: Compressed gas

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Extreme risk of explosion by shock, friction, fire or other sources of ignition.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Heat. Sparks. Open flame. Direct sunlight. Overheating.

10.5. Incompatible materials

No additional information available



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10.6. Hazardous decomposition products

No additional information available

Acute toxicity (oral) Acute toxicity (oranal) Acute toxicity (dermal) Acute toxicity (dermal) Acute toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met) Acute toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met) Acute toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) LC50 Inhalation - Rat Propane (74-98-6) LC50 Inhalation - Rat [ppm] > 280000 ppm (literature) Polyethylene glycol (25322-68-3) LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method) > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Oerm cell mutagenicity Not classified (Based on available data, the classification criteria are not met) Accinogenicity Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classifica	SECTION 11: Toxicological inf	ormation		
Acute toxicity (dermal) Acute toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) LC50 Inhalation - Rat > 688 mg/m³ Propane (74-98-6) LC50 Inhalation - Rat [ppm] > 280000 ppm (literature) Polyethylene glycol (25322-68-3) LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method) LD50 dermal rat > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	11.1. Information on hazard classes a	s defined in Regulation (EC) No 1272/2008		
Acute toxicity (inhalation) Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) LC50 Inhalation - Rat Propane (74-98-6) LC50 Inhalation - Rat [ppm] > 280000 ppm (literature) Polyethylene glycol (25322-68-3) LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method) > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Acroingenicity Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classifiable Reproductive toxicity Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	Acute toxicity (oral)	Not classified (Based on available data, the classification criteria are not met)		
propene (115-07-1) LC50 Inhalation - Rat > 688 mg/m³ Propane (74-98-6) LC50 Inhalation - Rat [ppm] > 280000 ppm (literature) Polyethylene glycol (25322-68-3) LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method) LD50 dermal rat > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Serious eye damage/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met) Carcinogenicity Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	Acute toxicity (dermal)	Not classified (Based on available data, the classification criteria are not met)		
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Propane (74-98-6) LC50 Inhalation - Rat [ppm] > 280000 ppm (literature) Polyethylene glycol (25322-68-3) LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method) LD50 dermal rat > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Serious eye damage/irritation Not classified (Based on available data, the classification criteria are not met) Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met) Carcinogenicity Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) STOT-single exposure Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	propene (115-07-1)			
Description	LC50 Inhalation - Rat	> 688 mg/m³		
Polyethylene glycol (25322-68-3) LD50 oral rat	Propane (74-98-6)			
LD50 oral rat > 2000 mg/kg bodyweight (OECD 423 method)	LC50 Inhalation - Rat [ppm]	> 280000 ppm (literature)		
LD50 dermal rat > 2000 mg/kg bodyweight (OECD 402 method) Skin corrosion/irritation Not classified (Based on available data, the classification criteria are not met) Serious eye damage/irritation Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) STOT-single exposure Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	Polyethylene glycol (25322-68-3)			
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Respiratory or skin sensitisation Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) IARC group 3 - Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) STOT-single exposure Not classified (Based on available data, the classification criteria are not met) STOT-repeated exposure Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met)	Skin corrosion/irritation	Not classified (Based on available data, the classification criteria are not met)		
Germ cell mutagenicity Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) propene (115-07-1) IARC group 3 - Not classifiable Reproductive toxicity Not classified (Based on available data, the classification criteria are not met) STOT-single exposure Not classified (Based on available data, the classification criteria are not met) STOT-repeated exposure Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) Aspiration hazard GC 52	Serious eye damage/irritation	Not classified (Based on available data, the classification criteria are not met)		
Carcinogenicity Not classified (Based on available data, the classification criteria are not met) Propene (115-07-1) IARC group 3 - Not classifiable Reproductive toxicity Not classified (Based on available data, the classification criteria are not met) STOT-single exposure Not classified (Based on available data, the classification criteria are not met) STOT-repeated exposure Not classified (Based on available data, the classification criteria are not met) Aspiration hazard Not classified (Based on available data, the classification criteria are not met) October 1975 Not classified (Based on available data, the classification criteria are not met)	Respiratory or skin sensitisation	Not classified (Based on available data, the classification criteria are not met)		
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STOT-repeated exposure Not classified (Based on available data, the classification criteria are not met) Not classified (Based on available data, the classification criteria are not met) GC 52	Reproductive toxicity	Not classified (Based on available data, the classification criteria are not met)		
Aspiration hazard Not classified (Based on available data, the classification criteria are not met) GC 52	STOT-single exposure	Not classified (Based on available data, the classification criteria are not met)		
GC 52	STOT-repeated exposure	Not classified (Based on available data, the classification criteria are not met)		
	Aspiration hazard	Not classified (Based on available data, the classification criteria are not met)		
Vaporizer Container fitted with a sealed spray attachment	GC 52			
	Vaporizer	Container fitted with a sealed spray attachment		

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms

No additional information available, No harmful effects are to be expected if used properly. The contained ingredients can be harmful, but they are hermetically enclosed in the article and can not be released.

The dismantling of the article is prohibited.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Due to the consistency along with the low water solubility of the product a bioavailability is

Hazardous to the aquatic environment, short-term (acute)

Not classified (Based on available data, the classification criteria are not met)

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Hazardous to the aquatic environment, long-term (chronic)

Not classified (Based on available data, the classification criteria are not met)

but-1-ene (106-98-9)	
LC50 - Fish [1]	14.8 mg/l (72 h; Quantitative structure-activity relationship (QSAR); Oncorhynchus mykiss)
EC50 - Crustacea [1]	18.7 mg/l (48 h; Quantitative structure-activity relationship (QSAR); Daphnia sp.)
EC50 96h - Algae [1]	14.9 mg/l (Quantitative structure-activity relationship (QSAR); algae)
propene (115-07-1)	
LC50 - Fish [1]	43.3 mg/l (72 h; Oncorhynchus mykiss (Rainbow trout); Quantitative structure-activity relationship (QSAR))
EC50 - Crustacea [1]	28.2 mg/l (48 h; daphnia; Quantitative structure-activity relationship (QSAR))
EC50 96h - Algae [1]	12.1 mg/l (algae; Quantitative structure-activity relationship (QSAR))
Polyethylene glycol (25322-68-3)	
LC50 - Fish [1]	> 100 mg/l (96 h; Poecilia reticulata; (OECD 203 method))
EC50 - Crustacea [1]	> 100 mg/l (48 h; Daphnia magna; (OECD 202 method))
ErC50 algae	100 – 1000 mg/l (96 h)
NOEC chronic fish	13671.586 mg/l (28 d; Poecilia reticulata (Guppy)

12.2. Persistence and degradability

NOEC chronic crustacea

propene (115-07-1)			
Persistence and degradability	Readily biodegradable in water.		
Propane (74-98-6)			
Persistence and degradability	Readily biodegradable in water.		
Polyethylene glycol (25322-68-3)			
Persistence and degradability Readily biodegradable.			

17475.27 mg/l (21 d; Daphnia magna; (calculated value))

12.3. Bioaccumulative potential

propene (115-07-1)			
Partition coefficient n-octanol/water (Log Kow) 1.77 (20 °C)			
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).		
Propane (74-98-6)			
Bioaccumulative potential Low bioaccumulation potential (Log Kow < 4).			
Polyethylene glycol (25322-68-3)			
Bioaccumulative potential not bioaccumulable.			

12.4. Mobility in soil

No additional information available



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12.5. Results of PBT and vPvB assessment

GC 52

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

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

Regional legislation (waste)

Waste treatment methods

Product/Packaging disposal recommendations

Additional information

European List of Waste (LoW) code

Disposal must be done according to official regulations.

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

Container under pressure. Do not drill or burn even after use.

Flammable vapours may accumulate in the container.

14 06 03* - other solvents and solvent mixtures

16 05 04* - gases in pressure containers (including halons) containing dangerous

substances

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
UN 3150	UN 3150	UN 3150	UN 3150
14.2. UN proper shipping name			
HYDROCARBON GAS REFILLS FOR SMALL DEVICES	HYDROCARBON GAS REFILLS FOR SMALL DEVICES	Hydrocarbon gas Refills for small devices	HYDROCARBON GAS REFILLS FOR SMALL DEVICES
Transport document description			
UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1, (D)	UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1	UN 3150 Hydrocarbon gas Refills for small devices, 2.1	UN 3150 HYDROCARBON GAS REFILLS FOR SMALL DEVICES, 2.1
14.3. Transport hazard class(es)			
2.1	2.1	2.1	2.1
2	2	2	2
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No



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ADR	IMDG	IATA	RID	
No supplementary information available				

14.6. Special precautions for user

Overland transport

6F Classification code (ADR) Limited quantities (ADR) 0 Excepted quantities (ADR) E0 Packing instructions (ADR) P209 Mixed packing provisions (ADR) MP9 Transport category (ADR) Special provisions for carriage - Loading, unloading CV9 and handling (ADR)

Special provisions for carriage - Operation (ADR) S2 Tunnel restriction code (ADR) D

Transport by sea

0 Limited quantities (IMDG) Excepted quantities (IMDG) E0 Packing instructions (IMDG) P003 EmS-No. (Fire) F-D EmS-No. (Spillage) S-U Stowage category (IMDG) В Stowage and handling (IMDG) SW2 MFAG-No 115

Air transport

E0 PCA Excepted quantities (IATA) Forbidden PCA Limited quantities (IATA) PCA limited quantity max net quantity (IATA) Forbidden PCA packing instructions (IATA) 201 PCA max net quantity (IATA) 1kg CAO packing instructions (IATA) 201 CAO max net quantity (IATA) 15kg Special provisions (IATA) A802 ERG code (IATA) 10L

Rail transport

Classification code (RID) 6F Limited quantities (RID) 0 Excepted quantities (RID) E0 Packing instructions (RID) P209 MP9 Mixed packing provisions (RID) Transport category (RID) Special provisions for carriage - Loading, unloading CW9 and handling (RID) Colis express (express parcels) (RID) CE₂ Hazard identification number (RID) 23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable



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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	Entry title or description	
40.	but-1-ene ; propene ; Propane	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	

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

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	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DNEL	Derived-No Effect Level	



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Abbreviations and acronyms:			
EC50	Median effective concentration		
ED	Endocrine disrupting properties		
EC-No.	European Community number		
EN	European Standard		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
IOELV	Indicative Occupational Exposure Limit Value		
LC50	Median lethal concentration		
LD50	Median lethal dose		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
N.O.S.	Not Otherwise Specified		
OEL	Occupational Exposure Limit		
PBT	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		
SDS	Safety Data Sheet		
STP	Sewage treatment plant		
TLM	Median Tolerance Limit		
TRGS	Technical Rules for Hazardous Substances		
VOC	Volatile Organic Compounds		
WGK	Water Hazard Class		
vPvB	Very Persistent and Very Bioaccumulative		
NOAEL	No-Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
LOAEL	Lowest Observed Adverse Effect Level		

Data sources Training advice European Chemicals Agency, http://echa.europa.eu/. manufacturer. Department issuing data specification sheet.

Full text of H- and EUH-statements:		
Flam. Gas 1A	Flammable gases, Category 1A	
H220	Extremely flammable gas.	
H280	Contains gas under pressure; may explode if heated.	
Press. Gas (Comp.)	Gases under pressure : Compressed gas	

SDS EU HILTI



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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.