

# CP 620

Safety information for 2-Component-products

Issue date: 27/09/2024 Revis

Revision date: 27/09/2024

Supersedes: 03/11/2021

Version: 8.1

# SECTION 1: Kit identification 1.1 Product identifier Trade name CP 620 Product code BU Fire Protection Image: CP 620 Image: CP 620

1.2 Details of the supplier of the Safety information for 2-Component-products

Germany

Regulatory reference

WGK 1, Slightly hazardous to water (Classification according to VwVwS, Annex 4)

A SDS for each of these components is included. Please do not separate any component SDS from this cover page

## **SECTION 3: Kit contents**

## **Classification of the Product**

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

Acute Tox. 4 (Inhalation)	H332
Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 2	H351
Repr. 2	H361d
STOT SE 3	H335
STOT RE 2	H373
Aquatic Chronic 3	H412

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

#### Label elements

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



H315 - Causes skin irritation.

diphenylmethanediisocyanate; zinc borate

4,4'-diphenylmethanediisocyanate, isomeres and homologues; 4,4'-

Danger

Signal word (CLP) Hazardous ingredients

Hazard statements (CLP)

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	<ul> <li>H317 - May cause an allergic skin reaction.</li> <li>H319 - Causes serious eye irritation.</li> <li>H332 - Harmful if inhaled.</li> <li>H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.</li> <li>H335 - May cause respiratory irritation.</li> <li>H351 - Suspected of causing cancer.</li> <li>H361 - Suspected of damaging fertility or the unborn child.</li> <li>H373 - May cause damage to organs through prolonged or repeated exposure.</li> <li>H412 - Harmful to aquatic life with long lasting effects.</li> </ul>
Precautionary statements (CLP)	<ul> <li>P260 - Do not breathe vapours.</li> <li>P280 - Wear eye protection, protective clothing, protective gloves.</li> <li>P284 - In case of inadequate ventilation wear respiratory protection.</li> <li>P302+P352 - IF ON SKIN: Wash with plenty of water.</li> <li>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P342+P311 - If experiencing respiratory symptoms: Call a doctor, a POISON CENTER.</li> </ul>
Extra phrases	As from 24 August 2023 adequate training is required before industrial or professional use

# Additional information

Name	General description	Quantity	Unit	Classification according to Regulation (EC) No. 1272/2008 [CLP]
CP 620, B		1	pcs (pieces)	Acute Tox. 4 (Inhalation:dust,mist), H332 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
CP 620, A		1	pcs (pieces)	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 2, H361 Aquatic Chronic 3, H412

General advice	For professional users only
SECTION 5: Safe handling adv	ice
Environmental precautions	Avoid release to the environment
Storage conditions	Store in a well-ventilated place. Keep cool.
Precautions for safe handling	Do not handle until all safety precautions have been read and understood. Wear personal protective equipment Do not breathe vapours. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes In case of inadequate ventilation wear respiratory protection.
Methods for cleaning up	Take up liquid spill into absorbent material Notify authorities if product enters sewers or public waters

SECTION 6: First aid measures	
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



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Kit Safety Information Sheet (SIS)

	If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Call a poison center or a doctor if you feel unwell
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 with plenty of water/… If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing.
First-aid measures general	If you feel unwell, seek medical advice (show the label where possible)
Symptoms/effects after eye contact	Eye irritation
Symptoms/effects after inhalation	May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Symptoms/effects after skin contact	Irritation May cause an allergic skin reaction.
Other medical advice or treatment	Treat symptomatically

# **SECTION 7: Fire fighting measures**

Protection during firefighting

Hazardous decomposition products in case of fire

Self-contained breathing apparatus Complete protective clothing Toxic fumes may be released Carbon dioxide Carbon monoxide

## **SECTION 8: Other information**

No data available



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 27.09.2024 Revision date: 27.09.2024 Supersedes version of: 03.11.2021

Version: 9.0

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

#### 1.1. Product identifier

Product form Trade name UFI Product code Mixture CP 620, B UYX3-1UYR-G52Y-4R6R BU Fire Protection

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

## 1.2.1. Relevant identified uses

Main use category Use of the substance/mixture Professional use Firestop foam

## 1.2.2. Uses advised against

No additional information available

#### **1.3. Details of the supplier of the safety data sheet**

Supplier	
Hilti Deutschland AG	
Hiltistr. 2	
DE 86916 Kaufering	
Deutschland	
T +49 8191 90-0 , F +49 8191 90-1122	
de.kundenservice@hilti.com	

FL 9494 Schaan Liechtenstein T +423 234 2111 product.compliance-fire.protection@hilti.com

Feldkircherstraße 100

Department issuing data specification sheet

#### 1.4. Emergency telephone number

Emergency number

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

Hilti AG

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
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	H373
Full text of H- and EUH-statements: see section 16	

#### Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2.2. Label elements	
Labelling according to Regulation (EC) No	o. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS07 GHS08
Signal word (CLP)	Danger
Contains	4,4'-diphenylmethanediisocyanate, isomeres and homologues
Hazard statements (CLP)	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.
Precautionary statements (CLP)	P260 - Do not breathe vapours.
	P280 - Wear protective gloves, protective clothing, eye protection.
	P284 - In case of inadequate ventilation wear respiratory protection.
	P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
	P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or
	doctor/physician.
Extra phrases	As from 24 August 2023 adequate training is required before industrial or professional use.
2.3. Other hazards	

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
Reaction products of phosphoryl trichloride and 2-	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
methyloxirane (TCPP) (1244733-77-4)	This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
4,4'-methylenediphenyl diisocyanate;	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
diphenylmethane-4,4'-diisocyanate (101-68-8)	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
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	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



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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 Stoff mit nationalem Arbeitsplatzgrenzwert (DE)	CAS-No.: 9016-87-9 EC-No.: 248-740-5	50 - 90	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
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate Stoff mit nationalem Arbeitsplatzgrenzwert (DE)	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014- 47	25 – 60	Acute Tox. 4 (Inhalation:dust,mist), 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
Reaction products of phosphoryl trichloride and 2- methyloxirane (TCPP)	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) Aquatic Chronic 3, H412

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
4,4'-diphenylmethanediisocyanate, isomeres and homologues	CAS-No.: 9016-87-9 EC-No.: 248-740-5	(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	
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014- 47	$(0,1 \le C \le 100)$ Resp. Sens. 1, H334 (5 $\le C \le 100)$ Eye Irrit. 2, H319 (5 $\le C \le 100)$ Skin Irrit. 2, H315 (5 $\le C \le 100)$ STOT SE 3, H335	

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



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 4. Eirst sid massing	
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. Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
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 with plenty of water/ Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). If skin irritation or rash occurs:
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. 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. Obtain emergency medical attention.
4.2. Most important symptoms and effects, b	oth acute and delayed
Symptoms/effects after inhalation	May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Danger of serious damage to health by prolonged exposure through inhalation. May cause an allergic skin reaction.
Symptoms/effects after skin contact Symptoms/effects after eye contact	Irritation. May cause an allergic skin reaction. Causes skin irritation. Eye irritation. Causes serious eye irritation.

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

Treat symptomatically.

5.1. Extinguishing media	
Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
5.2. Special hazards arising from the substa	ance or mixture
Hazardous decomposition products in case of fire	Toxic fumes may be released.
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.

## 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. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Evacuate unnecessary personnel.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.4. Reference to other sections	
Other information	public waters. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Dispose of materials or solid residues at an authorized site.
Methods for cleaning up	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or
6.3. Methods and material for cor	tainment and cleaning up
Avoid release to the environment. Preve	ent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.
6.2. Environmental precautions	
Emergency procedures	Ventilate area.
	refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.
6.1.2. For emergency responders Protective equipment	Do not attempt to take action without suitable protective equipment. For further information
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For further information refer to section 13. See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage	ge			
7.1. Precautions for safe handling				
Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. 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.			
Hygiene measures	Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. 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	Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep only in the original container in a cool, well ventilated place away from :			
Incompatible products	Strong bases. Strong acids.			
Incompatible materials	Sources of ignition. Direct sunlight.			
Storage temperature	5 – 25 °C			
Storage class (LGK, TRGS 510)	LGK 10 - Combustible liquids			

#### 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

4,4'-diphenylmethanediisocyanate, isomeres and homologues (9016-87-9)		
Germany - Occupational Exposure Limits (TRGS 900)		
Local name pMDI (als MDI berechnet)		
AGW (OEL TWA) 0,05 mg/m <sup>3</sup> (E)		



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

4,4'-diphenylmethanediisocyanate, isomeres and he	omologues (9016-87-9)
Peak exposure limitation factor	1;=2=(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); H - hautresorptiv; Sah - Atemwegs- und Hautsensibilisierender Stoff; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 12 - Der Arbeitsplatzgrenzwert gilt in der Regel nur für die Monomeren. Zur Beurteilung von Oligomeren oder Polymeren siehe TRGS 430 "Isocyanate"
Regulatory reference	TRGS900
4,4'-methylenediphenyl diisocyanate; diphenylmeth	ane-4,4'-diisocyanate (101-68-8)
Germany - Occupational Exposure Limits (TRGS 90	0)
Local name	4,4'-Methylendiphenyldiisocyanat
AGW (OEL TWA)	0,05 mg/m³ (E)
Peak exposure limitation factor	1;=2=(I)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); 11 - Summe aus Dampf und Aerosolen; 12 - Der Arbeitsplatzgrenzwert gilt in der Regel nur für die Monomeren. Zur Beurteilung von Oligomeren oder Polymeren siehe TRGS 430 "Isocyanate"; H - hautresorptiv; Sah - Atemwegs- und Hautsensibilisierender Stoff; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden
Regulatory reference	TRGS900

#### 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. Safety glasses. Avoid all unnecessary exposure.

# Personal protective equipment symbol(s):





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#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses

Eye protection			
Туре	Field of application	Characteristics	Standard
Safety glasses	Droplet		EN 166, EN 170

#### 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)	≥ 0,35		
Disposable gloves	Butyl rubber	6 (> 480 minutes)	≥ 0,35		

#### 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)

#### 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

Physical state Colour Odour Odour threshold Liquid amber. characteristic. Not available



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Melting point	Not applicable
Freezing point	Not available
Boiling point	Not available
Flammability	Not applicable,Non flammable.
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	Not available
Viscosity, kinematic	Not available
Solubility	Not available
Partition coefficient n-octanol/water (Log Kow)	Not available
Vapour pressure	Not available
Vapour pressure at 50°C	Not available
Density	≈ 1,032 g/cm³
Relative density	Not available
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

No additional information available

#### 9.2.2. Other safety characteristics

VOC content

15 g/I EPA method 24 (CP 620, Comp. A + B)

# SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 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

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

#### 10.5. Incompatible materials

Strong acids. Strong bases.

#### 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 1272/2008

Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) Not classified Not classified Inhalation:dust,mist: Harmful if inhaled.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

CP 620, B			
ATE CLP (dust,mist)	1,5 mg/l/4h		
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		
4,4'-methylenediphenyl diisocyanate; diphenylmet	hane-4,4'-diisocyanate (101-68-8)		
LD50 oral rat	> 2000 mg/kg		
LD50 oral	31600 mg/kg		
LD50 dermal rabbit	> 9400 mg/kg		
LC50 Inhalation - Rat (Dust/Mist)	> 0,368 mg/l/4h		
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		
Additional information	Based on available data, the classification criteria are not met		
Carcinogenicity	Suspected of causing cancer.		
4,4'-diphenylmethanediisocyanate, isomeres and	homologues (9016-87-9)		
IARC group	3 - Not classifiable		
4,4'-methylenediphenyl diisocyanate; diphenylmet	thane-4,4'-diisocyanate (101-68-8)		
IARC group	3 - Not classifiable		
Reproductive toxicity	Not classified		
Additional information	Based on available data, the classification criteria are not met		
STOT-single exposure	May cause respiratory irritation.		
4,4'-diphenylmethanediisocyanate, isomeres and	homologues (9016-87-9)		
STOT-single exposure	May cause respiratory irritation.		
4,4'-methylenediphenyl diisocyanate; diphenylmet	thane-4,4'-diisocyanate (101-68-8)		
STOT-single exposure	May cause respiratory irritation.		
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.		
4,4'-methylenediphenyl diisocyanate; diphenylmet	thane-4,4'-diisocyanate (101-68-8)		
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.		
Aspiration hazard	Not classified		
Additional information	Based on available data, the classification criteria are not met		
11.2. Information on other hazards			

# 11.2.1. Endocrine disrupting properties



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

## 11.2.2. Other information

Potential adverse human health effects and symptoms

Harmful if inhaled.

12.1. Toxicity	
Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short–term (acute)	Not classified
Hazardous to the aquatic environment, long–term (chronic)	Not classified
4,4'-diphenylmethanediisocyanate, isomeres and	homologues (9016-87-9)
LC50 - Other aquatic organisms [1]	> 1000 mg/l (96 h, Literature study)
12.2. Persistence and degradability	
СР 620, В	1
Persistence and degradability	Not established.
4,4'-diphenylmethanediisocyanate, isomeres and	homologues (9016-87-9)
Persistence and degradability	Not readily biodegradable in water.
12.3. Bioaccumulative potential	
СР 620, В	
Bioaccumulative potential	Not established.
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).
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.
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.



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SECTION 13: Disposal consideration	ons
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.
Ecological information	Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	08 05 01* - waste isocyanates
	08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances
HP Code	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.
	HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.
	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 / RID /

ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number or ID nur	nber		
Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping	name	-	
Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard cla	ss(es)		
Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group	·		·
Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazar	ds		
Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information	on available		1

## 14.6. Special precautions for user

#### Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated



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#### **Rail transport**

Not regulated

#### 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)

#### VOC Directive (2004/42)

VOC content

15 g/l EPA method 24 (CP 620, Comp. A + B)

#### **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

#### Germany

Water hazard class (WGK) Hazardous Incident Ordinance (12. BImSchV) WGK 2, Significantly hazardous to water (Classification according to AwSV, Annex 1). Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**



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Indication of changes			
Section	Changed item	Change	Comments
			general update
3		Modified	
8		Modified	
15		Modified	
16		Modified	

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		



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Abbreviations and acronyms:		
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 amending Regulation (EC) No 1907/2006. None.

Other information

Full text of H- and EUH-statements:			
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4		
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
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		
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.		



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Full text of H- and EUH-statements:		
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	
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]:		
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
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.



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 27.09.2024 Revision date: 27.09.2024 Supersedes version of: 03.11.2021

Version: 8.1

Department issuing data specification sheet

product.compliance-fire.protection@hilti.com

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

#### 1.1. Product identifier

Product form Trade name UFI Product code Mixture CP 620, A 25YA-KU83-E521-PEGY BU Fire Protection

#### 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 Use of the substance/mixture Professional use For professional use only Firestop foam

#### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

Supplier Hilti Deutschland AG Hiltistr. 2 DE 86916 Kaufering Deutschland T +49 8191 90-0 , F +49 8191 90-1122 de.kundenservice@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

Feldkircherstraße 100

FL 9494 Schaan

T +423 234 2111

Liechtenstein

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Reproductive toxicity, Category 2	H361
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

## Adverse physicochemical, human health and environmental effects

Suspected of damaging fertility or the unborn child. Causes skin irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms (CLP)





according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

	GHS07 GHS08
Signal word (CLP)	Warning
Contains	hexaboron dizinc undecaoxide, heptahydrate
Hazard statements (CLP)	H315 - Causes skin irritation.
	H319 - Causes serious eye irritation.
	H361 - Suspected of damaging the unborn child
	H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	P280 - Wear protective gloves, eye protection, protective clothing.
	P302+P352 - IF ON SKIN: Wash with plenty of soap and water.
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.

## 2.3. Other hazards

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

Component	
Ethylenediamine, propoxylated (25214-63-5)	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
Bis(2-dimethylaminoethyl) ether (3033-62-3)	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
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl- amino)ethanol (83016-70-0)	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
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether (1179964-22-7)	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
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	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
Reaction products of phosphoryl trichloride and 2- methyloxirane (TCPP) (1244733-77-4)	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 %

Component	omponent			
Ethylenediamine, propoxylated (25214-63-5)	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			
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether (1179964-22-7)	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 (TCPP) (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			



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Component			
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	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		
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl- amino)ethanol (83016-70-0)	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		
Bis(2-dimethylaminoethyl) ether (3033-62-3)	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

#### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Ethylenediamine, propoxylated	CAS-No.: 25214-63-5 EC-No.: 500-035-6 REACH-no: 01-2119471485- 32	25 – 40	Eye Irrit. 2, H319
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether	CAS-No.: 1179964-22-7 EC-No.: 926-564-6 REACH-no: 01-2119971810- 36	2,5 – 5	Acute Tox. 4 (Oral), H302 (ATE=732 mg/kg bodyweight)
Reaction products of phosphoryl trichloride and 2- methyloxirane (TCPP)	CAS-No.: 1244733-77-4 EC-No.: 807-935-0 REACH-no: 01-2119486772- 26	2,5 – 5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Aquatic Chronic 3, H412
hexaboron dizinc undecaoxide, heptahydrate	CAS-No.: 138265-88-0 EC-No.: 235-804-2	2,5 – 5	Repr. 2, H361d Aquatic Acute 1, H400 Aquatic Chronic 2, H411
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl- amino)ethanol	CAS-No.: 83016-70-0 EC-No.: 406-080-7 EC Index-No.: 603-146-00-9 REACH-no: 01-0000015559- 60	1 – 2,5	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1B, H314 Aquatic Chronic 3, H412



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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Bis(2-dimethylaminoethyl) ether	CAS-No.: 3033-62-3 EC-No.: 221-220-5	0,1 – 1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 3 (Dermal), H311 (ATE=300 mg/kg bodyweight) Acute Tox. 4 (Inhalation:dust,mist), H332 (ATE=1,5 mg/l/4h) Skin Corr. 1B, H314 Aquatic Chronic 3, H412

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	IF exposed or concerned: Get medical advice/attention.	
First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing.	
First-aid measures after skin contact	Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.	
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.	
4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects after skin contact	Irritation.	

Symptoms/effects after eye contact 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. Foam. Carbon dioxide.
5.2. Special hazards arising from the substant	nce or mixture
Hazardous decomposition products in case of fire	Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures				
6.1. Personal precautions, protective equ	5.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel Emergency procedures Ventilate spillage area. Avoid contact with skin and eyes.				
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".			



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6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containn	ment and cleaning up
Methods for cleaning up	Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
<b>6.4. Reference to other sections</b> For further information refer to section 13.	
For further information refer to section 13.	
For further information refer to section 13.	age
For further information refer to section 13. SECTION 7: Handling and stora	age
	Age Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities		
	Storage conditions	Store locked up. Store in a well-ventilated place.
	Storage temperature	5 – 25 °C
	Storage class (LGK, TRGS 510)	LGK 10 - Combustible liquids

# 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

No additional information available

## 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:

Safety glasses. Protective clothing. Gloves.





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#### 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	and protection					
Type 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)

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

No additional information available

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Colour	red.
Odour	Not available
Odour threshold	Not available
Melting point	Not applicable
Freezing point	Not available
Boiling point	Not available
Flammability	Not applicable
Lower explosion limit	Not available
Upper explosion limit	Not available
Flash point	Not applicable.
Auto-ignition temperature	Not available
Decomposition temperature	Not available



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pH Viscosity, kinematic Solubility Partition coefficient n-octanol/water (Log Kow) Vapour pressure Vapour pressure at 50°C Density Relative density Relative vapour density at 20°C	Not determined Not available Not available Not available Not available $\approx 1,3 \text{ g/cm}^3$ Not available Not available
Particle characteristics	Not applicable

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

## 9.2.2. Other safety characteristics

VOC content

15 mg/l EPA method 24 (CP 620, Comp. A + B)

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

## 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

## 10.5. Incompatible materials

No additional information available

#### **10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological informat	ion	
11.1. Information on hazard classes as defin		
Acute toxicity (oral)	Not classified	
Acute toxicity (dermal)	Not classified	
Acute toxicity (inhalation)	Not classified	
Bis(2-dimethylaminoethyl) ether (3033-62-3)		
LD50 oral rat	677 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))	
LD50 dermal rabbit	311 – 316 ml/kg (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Converted value, Dermal, 14 day(s))	
LC50 Inhalation - Rat (Dust/Mist)	4 mg/l/4h (OECD 403 method)	
LC50 Inhalation - Rat (Vapours)	> 2204 mg/l/4h (OECD 403 method)	



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2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-	amino)ethanol (83016-70-0)	
LD50 oral rat	1364 mg/kg bodyweight (Other, Rat, Male / female, Experimental value, Oral)	
LD50 oral	1364 mg/kg	
LD50 dermal rabbit	5700 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Dermal)	
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediph 22-7)	nenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether (1179964	
LD50 oral rat	732 mg/kg	
LD50 dermal rat	> 2000 mg/kg	
hexaboron dizinc undecaoxide, heptahydra	te (138265-88-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value of similar product, Oral, 14 day(s))	
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value of similar product, Dermal, 14 day(s))	
LC50 Inhalation - Rat	> 4,95 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Read- across, Inhalation (dust), 14 day(s))	
Skin corrosion/irritation Serious eye damage/irritation	Causes skin irritation. pH: Not determined Causes serious eye irritation.	
Respiratory or skin sensitisation	pH: Not determined Not classified	
Germ cell mutagenicity	Not classified	
Carcinogenicity	Not classified	
Reproductive toxicity	Suspected of damaging the unborn child	
STOT-single exposure	Not classified	
STOT-repeated exposure	Not classified	
Aspiration hazard	Not classified	

## 11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information		
12.1. Toxicity		
Ecology - general Hazardous to the aquatic environment, short–term (acute)	Harmful to aquatic life with long lasting effects. Not classified	
Hazardous to the aquatic environment, long–term (chronic)	Harmful to aquatic life with long lasting effects.	
Ethylenediamine, propoxylated (25214-63-5)		
LC50 - Fish [1]	4500 mg/l Leuciscus idus (golden orfe)	
EC50 72h - Algae [1]	35 mg/l	
NOEC chronic crustacea	> 1 mg/l	



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Bis(2-dimethylaminoethyl) ether (3033-62-3)		
LC50 - Fish [1]	131,2 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Semi-static system, Fresh water, Experimental value, Nominal concentration)	
EC50 - Crustacea [1]	102 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
ErC50 algae	24 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-amino	)ethanol (83016-70-0)	
LC50 - Fish [1]	> 320 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, GLP)	
EC50 - Crustacea [1]	72 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)	
ErC50 algae	> 110 mg/l (Equivalent or similar to OECD 201, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)	
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)		
LC50 - Fish [1]	169 μg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read- across)	
EC50 - Crustacea [1]	$155-413\ \mu\text{g/l}$ (US EPA, 48 h, Ceriodaphnia dubia, Static system, Fresh water, Readacross)	

## 12.2. Persistence and degradability

Bis(2-dimethylaminoethyl) ether (3033-62-3)			
Persistence and degradability	Not readily biodegradable in water.		
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-amino)e	thanol (83016-70-0)		
Persistence and degradability Not readily biodegradable in water.			
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, oligomeric reaction products with Propylene oxide and n-butyl glycidyl ether (1179964- 22-7)			
Persistence and degradability	biologically not degradable.		
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		

#### 12.3. Bioaccumulative potential

Bis(2-dimethylaminoethyl) ether (3033-62-3)			
Partition coefficient n-octanol/water (Log Pow)	-0,34 (Experimental value, EU Method A.8: Partition Coefficient, 20 °C)		
Bioaccumulative potential	Not bioaccumulative.		
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-amino)ethanol (83016-70-0)			
Partition coefficient n-octanol/water (Log Pow)	-0,48 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 26 °C)		



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-amino)	ethanol (83016-70-0)		
Bioaccumulative potential	Not bioaccumulative.		
2,2',6,6'-Tetrabromo-4,4'-isopropylidenediphenol, c 22-7)	ligomeric reaction products with Propylene oxide and n-butyl glycidyl ether (1179964-		
Partition coefficient n-octanol/water (Log Pow)	4,8		
hexaboron dizinc undecaoxide, heptahydrate (1382	265-88-0)		
BCF - Fish [1]	116 – 60960 (21 day(s), Semi-static system, Marine water, Read-across, Fresh weight)		
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).		
12.4. Mobility in soil			
Bis(2-dimethylaminoethyl) ether (3033-62-3)			
Surface tension	No data available in the literature		
Ecology - soil	Low potential for adsorption in soil.		
2-(2-(2-Dimethylaminoethoxy)-ethyl-methyl-amino)ethanol (83016-70-0)			
Surface tension	61,3 mN/m (21 °C, 1 vol %, EU Method A.5: Surface tension)		
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	4,07 (log Koc, OECD draft TGP94/75, Experimental value, GLP)		
Ecology - soil	Low potential for mobility in soil.		
hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)			
Surface tension	Data waiving		
Ecology - soil	Adsorbs into the 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

No additional information available

# SECTION 13: Disposal considerations

## 13.1. Waste treatment methods

Waste treatment methods Product/Packaging disposal recommendations European List of Waste (LoW, EC 2000/532)

HP Code

Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose in a safe manner in accordance with local/national regulations.

08 04 09\* - waste adhesives and sealants containing organic solvents or other dangerous substances

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

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

## **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / RID /



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

IMDG	ΙΑΤΑ	RID
ber		<b>I</b>
Not applicable	Not applicable Not app	
ame		
Not applicable	Not applicable	Not applicable
s(es)		
Not applicable	Not applicable Not	
Not applicable	Not applicable Not applica	
ls		<b>I</b>
Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No Dangero environ	
	ber Not applicable ame Not applicable s(es) Not applicable S S Dangerous for the environment: No	ber       Not applicable     Not applicable       ame     Not applicable       Not applicable     Not applicable       s(es)     Not applicable       Not applicable     Not applicable       Not applicable     Not applicable       Image: Not applicable     Not applicable

#### 14.6. Special precautions for user

**Overland transport** 

No data available

Transport by sea

No data available

Air transport No data available

Rail transport

No data available

#### 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)



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#### 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)

VOC Directive (2004/42)

VOC content

15 mg/l EPA method 24 (CP 620, Comp. A + B)

#### **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

#### Germany

Water hazard class (WGK) Hazardous Incident Ordinance (12. BImSchV) WGK 1, Slightly hazardous to water (Classification according to AwSV, Annex 1). Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## **SECTION 16: Other information**

Indication of changes			
Section	Changed item	Change	Comments
			general update
8		Modified	
15		Modified	
16		Modified	

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	



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Abbreviations and acronyms:			
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		
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. 3 (Dermal) Acute toxicity (dermal), Category 3			
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4		
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1		



according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:			
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2		
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3		
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2		
H302	Harmful if swallowed.		
H311	Toxic in contact with skin.		
H314	Causes severe skin burns and eye damage.		
H315	Causes skin irritation.		
H319	Causes serious eye irritation.		
H332	Harmful if inhaled.		
H361	Suspected of damaging fertility or the unborn child.		
H361d	Suspected of damaging the unborn child.		
H400	Very toxic to aquatic life.		
H411	Toxic to aquatic life with long lasting effects.		
H412	Harmful to aquatic life with long lasting effects.		
Repr. 2	Reproductive toxicity, Category 2		
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B		
Skin Irrit. 2	Skin corrosion/irritation, Category 2		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:				
Skin Irrit. 2	H315	Calculation method		
Eye Irrit. 2	H319	Calculation method		
Repr. 2	H361	Calculation method		
Aquatic Chronic 3	H412	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.