

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Proguard 169 Plus Part B

Revision date: 17.04.2023

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

1.1. Product identifier

Proguard 169 Plus Part B

UFI: 3NKQ-V4C8-QTEQ-E0M8

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

Use of the substance/mixture

Coatings and paints, fillers, putties, thinners

1.3. Details of the supplier of the safety data sheet

Company name:	Chesterton International GmbH	
Street:	Am Lenzenfleck 23	
Place:	DK-85737 Ismaning GERMANY	
Telephone:	+49 89 99 65 46 - 0	Telefax: +49 89 99 65 46 - 50
e-mail:	eu-sds@chesterton.com	
Contact person:	eu-sds@chesterton.com	Telephone: +49 89 99 65 46 - 0
e-mail:	eu-sds@chesterton.com	
Internet:	www.chesterton.com	
Responsible Department:	eu-sds@chesterton.com	

1.4. Emergency telephone number: +49(0) 551 - 1 92 40 (GIZ-Nord, 24h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 3; H226
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Isophorondiisocyanate homopol-ymer
Contains:
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %
xylene
Hexamethylen-1,6-diisocyanat Homopolymer
dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane

Signal word: Warning

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Pictograms:



Hazard statements

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
53880-05-0	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %			40 - < 45 %
	500-125-5		01-2119488734-24	
	Skin Sens. 1B, STOT SE 3; H317 H335			
1330-20-7	xylene			30 - < 35 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer			15 - < 20 %
	500-060-2		01-2119488934-20	
	Acute Tox. 4, Skin Sens. 1, STOT SE 3; H332 H317 H335			
108-65-6	2-methoxy-1-methylethyl acetate			5 - < 10 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3, STOT SE 3; H226 H336			
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine			1 - < 5 %
	203-542-8	603-047-00-0	01-2119492298-24	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B; H226 H332 H312 H302 H314			
100-41-4	ethylbenzene			1 - < 5 %
	202-849-4	601-023-00-4	01-2119489370-35	
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H225 H332 H373 H304 H412			
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane			< 1 %
	201-039-8	050-030-00-3	01-2119496068-27	
	Muta. 2, Repr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 1, STOT RE 1, Aquatic Acute 1, Aquatic Chronic 1; H341 H360FD H318 H317 H370 H372 H400 H410			

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

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
53880-05-0	500-125-5	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %	40 - < 45 %
		oral: LD50 = > 14000 mg/kg	
1330-20-7	215-535-7	xylene	30 - < 35 %
		inhalation: LC50 = 6247 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 12126 mg/kg; oral: LD50 = 6631 mg/kg	
28182-81-2	500-060-2	Hexamethylen-1,6-diisocyanat Homopolymer	15 - < 20 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 5000 mg/kg	
108-65-6	203-603-9	2-methoxy-1-methylethyl acetate	5 - < 10 %
		inhalation: LC50 = >23,878 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 6190 - 10000 mg/kg	
108-01-0	203-542-8	2-dimethylaminoethanol; N,N-dimethylethanolamine	1 - < 5 %
		inhalation: LC50 = 1641 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 1219 mg/kg; oral: LD50 = 1182,7 mg/kg STOT SE 3; H335: >= 5 - 100	
100-41-4	202-849-4	ethylbenzene	1 - < 5 %
		inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = ca. 3500 mg/kg	
77-58-7	201-039-8	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	< 1 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 2071 mg/kg	

Further Information

Contains Isocyanate. May produce an allergic reaction.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated, saturated clothing. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Seek medical advice immediately.
Do not wash with: Solvents/Thinner

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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Remove contact lenses, if present and easy to do. Continue rinsing.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Let 1 glass of water be drunken in little sips (dilution effect).

Do NOT induce vomiting.

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

No information available.

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

First Aid, decontamination, treatment of symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

- alcohol resistant foam
- Water spray jet
- Carbon dioxide (CO₂)
- Dry extinguishing powder

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

No information available.

5.3. Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.
In case of fire: Wear self-contained breathing apparatus.

Special protective equipment for firefighters: Protective clothing.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid contact with skin, eyes and clothes.
Safe handling: see section 7
Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Cover drains. Adverse environmental effects

6.3. Methods and material for containment and cleaning up

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For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Personal protection equipment: see section 8

Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on protection against fire and explosion

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharges.

Advice on general occupational hygiene

Work in well-ventilated zones or use proper respiratory protection. Only wear fitting, comfortable and clean protective clothing. Avoid contact with skin, eyes and clothes. Wash hands and face before breaks and after work and take a shower if necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place. Keep/Store only in original container.

Hints on joint storage

Keep away from:

- Food and feedingstuffs

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Occupational exposure limits

CAS No	Substance	ppm	mg/m ³	fib/cm ³	Category	Origin
108-65-6	2-Methoxy-1-methylethylacetate	50	275		TWA (8 h)	
		100	550		STEL (15 min)	
100-41-4	Ethylbenzene	100	442		TWA (8 h)	
		200	884		STEL (15 min)	
1330-20-7	Xylene, mixed isomers	50	221		TWA (8 h)	
		100	442		STEL (15 min)	

Biological limit values

CAS No	Substance	Parameter	Value	Test material	Sampling time
100-41-4	Ethyl benzene	Mandelic acid and phenylglyoxylic acid	0.7 g/g	Creatinine	End of shift at end of workweek

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
53880-05-0	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %			
Worker DNEL, long-term		inhalation	local	0,29 mg/m ³
Worker DNEL, acute		inhalation	local	0,58 mg/m ³
1330-20-7	xylene			
Worker DNEL, long-term		inhalation	local	221 mg/m ³
Consumer DNEL, long-term		inhalation	local	65,3 mg/m ³
Worker DNEL, long-term		inhalation	systemic	221 mg/m ³
Worker DNEL, acute		inhalation	systemic	442 mg/m ³
Worker DNEL, acute		inhalation	local	442 mg/m ³
Worker DNEL, long-term		dermal	systemic	212 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	65,3 mg/m ³
Consumer DNEL, acute		inhalation	systemic	260 mg/m ³
Consumer DNEL, acute		inhalation	local	260 mg/m ³
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	5 mg/kg bw/day
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer			
Worker DNEL, long-term		inhalation	local	0,5 mg/m ³
Worker DNEL, acute		inhalation	local	1 mg/m ³
108-65-6	2-methoxy-1-methylethyl acetate			
Worker DNEL, long-term		inhalation	systemic	275 mg/m ³
Worker DNEL, acute		inhalation	local	550 mg/m ³
Worker DNEL, long-term		dermal	systemic	796 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	33 mg/m ³
Consumer DNEL, long-term		inhalation	local	33 mg/m ³
Consumer DNEL, long-term		dermal	systemic	320 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	36 mg/kg bw/day
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine			
Consumer DNEL, long-term		inhalation	systemic	0,438 mg/m ³

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Consumer DNEL, long-term	oral	systemic	0,148 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	1,76 mg/m ³
Worker DNEL, acute	inhalation	systemic	5,28 mg/m ³
Worker DNEL, long-term	inhalation	local	1,76 mg/m ³
Worker DNEL, acute	inhalation	local	13,53 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,25 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	1,2 mg/kg bw/day
100-41-4	ethylbenzene		
Worker DNEL, acute	inhalation	local	293 mg/m ³
Worker DNEL, long-term	inhalation	systemic	77 mg/m ³
Worker DNEL, acute	inhalation	systemic	293 mg/m ³
Worker DNEL, long-term	dermal	systemic	180 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	15 mg/m ³
Consumer DNEL, long-term	oral	systemic	1,6 mg/kg bw/day
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane		
Worker DNEL, acute	inhalation	systemic	0,059 mg/m ³
Worker DNEL, long-term	inhalation	systemic	0,02 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,43 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	2,08 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,005 mg/m ³
Consumer DNEL, acute	inhalation	systemic	0,04 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,16 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,003 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,02 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
Environmental compartment		
1330-20-7	xylene	
Freshwater		0,044 mg/l
Freshwater (intermittent releases)		0,01 mg/l
Marine water		0,004 mg/l
Freshwater sediment		2,52 mg/kg
Marine sediment		0,252 mg/kg
Micro-organisms in sewage treatment plants (STP)		1,6 mg/l
Soil		0,852 mg/kg
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer	
Freshwater		0,127 mg/l
Marine water		0,0127 mg/l
Freshwater sediment		266700 mg/kg
Marine sediment		26670 mg/kg
Micro-organisms in sewage treatment plants (STP)		6,46 mg/l
Soil		53182 mg/kg
108-65-6	2-methoxy-1-methylethyl acetate	
Freshwater		0,635 mg/l
Freshwater (intermittent releases)		6,35 mg/l
Marine water		0,064 mg/l
Freshwater sediment		3,29 mg/kg
Marine sediment		0,329 mg/kg
Micro-organisms in sewage treatment plants (STP)		100 mg/l
Soil		0,29 mg/kg
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine	
Freshwater		0,066 mg/l
Freshwater (intermittent releases)		0,661 mg/l
Marine water		0,004 mg/l
Freshwater sediment		0,246 mg/kg
Marine sediment		0,015 mg/kg
Micro-organisms in sewage treatment plants (STP)		10 mg/l
Soil		0,01 mg/kg
100-41-4	ethylbenzene	

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Freshwater	0,1 mg/l
Freshwater (intermittent releases)	0,1 mg/l
Marine water	0,01 mg/l
Freshwater sediment	13,7 mg/kg
Marine sediment	1,37 mg/kg
Secondary poisoning	20 mg/kg
Micro-organisms in sewage treatment plants (STP)	9,6 mg/l
Soil	2,68 mg/kg
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane
Freshwater	0 mg/l
Freshwater (intermittent releases)	0,005 mg/l
Marine water	0 mg/l
Freshwater sediment	0,05 mg/kg
Marine sediment	0,005 mg/kg
Secondary poisoning	0,2 mg/kg
Micro-organisms in sewage treatment plants (STP)	100 mg/l
Soil	0,041 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection:

- Eye glasses with side protection
- goggles

Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber),

Wearing time with permanent contact: Thickness of the glove material: $\geq 0,4$ mm, Breakthrough time: >480 min

Wearing time with occasional contact (splashes): Thickness of the glove material: $\geq 0,1$ mm, Breakthrough time: > 30 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

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Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	various	
Odour:	characteristic	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		137 - 143 °C
Flammability		
Solid/liquid:		No data available
Lower explosion limits:		1,1 vol. %
Upper explosion limits:		7 vol. %
Flash point:		30 °C
Auto-ignition temperature:		315 °C
Decomposition temperature:		No data available
Viscosity / kinematic: (at 20 °C)		20 mm ² /s
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents	No information available.	
Partition coefficient n-octanol/water:		No data available
Vapour pressure: (at 20 °C)		6,7 - 8,2 hPa
Density (at 20 °C):		1,038 g/cm ³
Bulk density:		No data available
Relative vapour density:		No data available

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

No information available.

Self-ignition temperature

Solid:

No data available

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Gas:	No data available
Oxidizing properties	
No information available.	
Other safety characteristics	
Evaporation rate:	No data available
Solid content:	63,4
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) 49279,2 mg/kg; ATE (dermal) 3419,8 mg/kg; ATE (inhalation vapour) 22,22 mg/l; ATE (inhalation dust/mist) 2,979 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
53880-05-0	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %				
	oral	LD50 > 14000 mg/kg	Rat	Study report (1976)	Method: other: Based on "Appraisal of th
1330-20-7	xylene				
	oral	LD50 6631 mg/kg	Rat	Publication (1962)	OECD Guideline 401
	dermal	LD50 12126 mg/kg	Rabbit	Publication (1962)	Single dermal dose under occlusion follo
	inhalation (4 h) vapour	LC50 6247 mg/l	Rat	Study report (1986)	EPA OPP 81-3
	inhalation dust/mist	ATE 1,5 mg/l			
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer				
	oral	LD50 > 5000 mg/kg	Rat	Study report (1983)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	OECD Guideline 402	
	inhalation vapour	ATE 11 mg/l			
	inhalation dust/mist	ATE 1,5 mg/l			
108-65-6	2-methoxy-1-methylethyl acetate				
	oral	LD50 6190 - 10000 mg/kg	Rat	Study report (1985)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1985)	OECD Guideline 402
	inhalation (4 h) dust/mist	LC50 >23,878 mg/l	Rat		
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine				
	oral	LD50 1182,7 mg/kg	Rat	Study report (1991)	OECD Guideline 401
	dermal	LD50 1219 mg/kg	Rat	Publication (1996)	OECD Guideline 403
	inhalation (4 h) vapour	LC50 1641 mg/l	Rat	Publication (1996)	OECD Guideline 403
	inhalation dust/mist	ATE 1,5 mg/l			
100-41-4	ethylbenzene				
	oral	LD50 ca. 3500 mg/kg	Rat	AMA Arch. Ind. Health. 14:387-398. (1956)	No guideline available
	dermal	LD50 15400 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 17,2 mg/l	Rat		

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	inhalation dust/mist	ATE	1,5 mg/l			
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane					
	oral	LD50 mg/kg	2071	Rat	Study report (1981)	OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010)	OECD Guideline 402

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Isophorondiisocyanate homopol-ymer

Contains:

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %; Hexamethylen-1,6-diisocyanat

Homopolymer; dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane)

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause respiratory irritation. (Isophorondiisocyanate homopol-ymer

Contains:

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %)

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

No data available

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
53880-05-0	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %					
	Acute fish toxicity	LC50 mg/l	> 1,51	96 h	Cyprinus carpio	Study report (2000) EU Method C.1
	Acute algae toxicity	ErC50 mg/l	> 3,1	72 h	Desmodesmus subspicatus	Study report (2002) OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 3,36	48 h	Daphnia magna	Study report (2002) OECD Guideline 202
	Acute bacteria toxicity	(EC50 mg/l)	> 10000	3 h	activated sludge of a predominantly domestic sewage	Study report (2007) OECD Guideline 209
1330-20-7	xylene					
	Acute fish toxicity	LC50	4,2 mg/l	96 h	Oncorhynchus mykiss	REACH Registration Dossier OECD Guideline 203
	Acute algae toxicity	ErC50	4,6 mg/l	72 h	Raphidocelis subcapitata	REACH Registration Dossier OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	10,389	48 h	Daphnia magna	Publication (2015) The endpoint calculated is the LL50, EL5
	Fish toxicity	NOEC mg/l	0,894	21 d	Oncorhynchus mykiss	REACH Registration Dossier OECD Guideline 210
	Crustacea toxicity	NOEC mg/l	1,17	7 d	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3 other: US EPA 600/4-91-003
	Acute bacteria toxicity	(EC50 mg/l)	> 175	0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (OECD Guideline 209
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer					
	Acute fish toxicity	LC50 mg/l	>100	96 h	Danio rerio (zebrafish)	
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	Study report (2006) EU Method C.3
	Acute crustacea toxicity	EC50 mg/l	>100	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(EC50 mg/l)	645,7	3 h	activated sludge, domestic	Study report (2006) EU Method C.11
108-65-6	2-methoxy-1-methylethyl acetate					

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	Acute fish toxicity	LC50 180 mg/l	100 -	96 h	Oncorhynchus mykiss	Study report (1987)	OECD Guideline 203
	Acute algae toxicity	ErC50 mg/l	> 1000	96 h	Raphidocelis subcapitata	Study report (1986)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 500	48 h	Daphnia magna	Study report (1987)	EU Method C.2
	Fish toxicity	NOEC mg/l	47,5	14 d	Oryzias latipes	Study report (1998)	OECD Guideline 204
	Crustacea toxicity	NOEC mg/l	>= 100	21 d	Daphnia magna	Study report (1998)	OECD Guideline 211
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine						
	Acute fish toxicity	LC50 mg/l	146,63	96 h	Leuciscus idus	REACH Registration Dossier	other: German industrial standard test g
	Acute algae toxicity	ErC50 mg/l	66,08	72 h	Desmodesmus subspicatus	REACH Registration Dossier	Method: other: fluorimetrically determin
	Acute crustacea toxicity	EC50 mg/l	98,37	48 h	Daphnia magna	REACH Registration Dossier	Method: other: Directive 79/831/EEC, Ann
100-41-4	ethylbenzene						
	Acute fish toxicity	LC50	4,2 mg/l	96 h	Oncorhynchus mykiss	Ecotoxicol. Environ. Saf. 16:158-169 (19	OECD Guideline 203
	Acute algae toxicity	ErC50	4,6 mg/l	72 h	Raphidocelis subcapitata	Chemosphere 10(10): 1123-1126 (1981)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	1,8 - 2,4	48 h	Daphnia magna	Water Res. 27:903-909 (1993)	other: According to EPA method F
	Acute bacteria toxicity	(EC50 mg/l)	ca. 600	0,5 h	activated sludge, domestic	Study report (1988)	OECD Guideline 209
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane						
	Acute fish toxicity	LC50 mg/l	21,2	96 h	Danio rerio	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50	> 1 mg/l	72 h	Desmodesmus subspicatus	Study report (1999)	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	1,7 - 3,4	48 h	Daphnia magna	Study report (1999)	OECD Guideline 202
	Acute bacteria toxicity	(EC50 mg/l)	> 1000	3 h	activated sludge of a predominantly domestic sewage	Study report (2010)	OECD Guideline 209

12.2. Persistence and degradability

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
100-41-4	ethylbenzene			
	OECD 301B	79%	10	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
53880-05-0	Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %	ca. 14,48
1330-20-7	xylene	3,15
28182-81-2	Hexamethylen-1,6-diisocyanat Homopolymer	7,58
108-65-6	2-methoxy-1-methylethyl acetate	1,2
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine	-0,55
100-41-4	ethylbenzene	3,6
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	4,44

BCF

CAS No	Chemical name	BCF	Species	Source
1330-20-7	xylene	60,3	Oncorhynchus mykiss	REACH Registration D
108-01-0	2-dimethylaminoethanol; N,N-dimethylethanolamine	3,162	Fish, species not reported	The BCFBAF program e
100-41-4	ethylbenzene	1	Oncorhynchus kisutch	Arch. Environ. Conta
77-58-7	dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane	1,49	Carassius carassius	Toxicol. Environ. Ch

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

No information available.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Dispose of waste according to applicable legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number or ID number:</u>	UN 1263
<u>14.2. UN proper shipping name:</u>	PAINT
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Classification code:	F1
Special Provisions:	163 367 650
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	30
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

<u>14.1. UN number or ID number:</u>	UN 1263
<u>14.2. UN proper shipping name:</u>	Paint
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Classification code:	F1
Special Provisions:	163 367 650
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

<u>14.1. UN number or ID number:</u>	UN 1263
<u>14.2. UN proper shipping name:</u>	PAINT
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	III
Hazard label:	3
Special Provisions:	163 223 367 955
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

<u>14.1. UN number or ID number:</u>	UN 1263
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14.2. UN proper shipping name:	PAINT	
14.3. Transport hazard class(es):	3	
14.4. Packing group:	III	
Hazard label:	3	
Special Provisions:	A3 A72 A192	
Limited quantity Passenger:	10 L	
Passenger LQ:	Y344	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		355
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		366
IATA-max. quantity - Cargo:		220 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 40

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D): 2 - obviously hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

xylene

Hexamethylen-1,6-diisocyanat Homopolymer

2-methoxy-1-methylethyl acetate

2-dimethylaminoethanol; N,N-dimethylethanolamine

ethylbenzene

dibutyltin dilaurate; dibutyl[bis(dodecanoyloxy)]stannane

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SECTION 16: Other information

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer
(Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
vPvB: very persistent, very bioaccumulative
MARPOL: International Convention for the Prevention of Marine Pollution from Ships
IBC: Intermediate Bulk Container
SVHC: Substance of Very High Concern

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.

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H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs (...) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)