

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Ceramic-Polymer NK C5-2 Part B

Revision date: 16.04.2020

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

1.1. Product identifier

Ceramic-Polymer NK C5-2 Part B

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

Use of the substance/mixture

Colour

Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

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

Hazard categories:

Flammable liquid: Flam. Liq. 3

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Reproductive toxicity: Repr. 1B

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Flammable liquid and vapour.

Harmful if inhaled.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

May damage fertility.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

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2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

n-Butanol; Butan-1-ol
Fatty acids C18 unsaturated, reaction products with triethylenetetramine
Bisphenol A; 4,4'-isopropylidenediphenol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
3,6-diazaoctanethylenediamin; triethylenetetramine
3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane

Signal word: Danger

Pictograms:



Hazard statements

H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H360F May damage fertility.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P264 Wash hands thoroughly after handling.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P362+P364 Take off contaminated clothing and wash it before reuse.
P310 Immediately call a POISON CENTER/doctor.
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	
	GHS Classification			
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			10 - < 15 %
	203-603-9	603-064-00-3		
	Flam. Liq. 3, Acute Tox. 3, STOT SE 3; H226 H331 H336			
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol			7 - < 10 %
	202-013-9	603-069-00-0	01-2119560597-27	
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2; H302 H315 H319			
71-36-3	n-Butanol; Butan-1-ol			7 - < 10 %
	200-751-6	603-004-00-6	01-2119484630-38	
	Flam. Liq. 3, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H302 H315 H318 H335 H336			
108-65-6	2-methoxy-1-methylethyl acetate			7 - < 10 %
	203-603-9	607-195-00-7	01-2119475791-29	
	Flam. Liq. 3; H226			
1330-20-7	xylene			7 - < 10 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315			
100-51-6	benzyl alcohol			5 - < 7 %
	202-859-9	603-057-00-5	01-2119492630-38	
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4; H332 H312 H302			
1226892-44-9	Fatty acids C18 unsaturated, reaction products with triethylenetetramine			2,5 - < 3 %
	629-765-4		01-2119490750-36	
	Skin Corr. 1A, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H314 H318 H317 H400 H410			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			0,5 - < 1 %
	220-666-8	612-067-00-9	01-2119514687-32	
	Acute Tox. 4, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H312 H302 H314 H317 H412			
112-24-3	3,6-diazaoctanethylenediamin; triethylenetetramine			0,5 - < 1 %
	203-950-6	612-059-00-5		
	Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1, Aquatic Chronic 3; H312 H314 H317 H412			
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol			0,5 - < 1 %
	201-245-8	604-030-00-0	01-2119457856-23	
	Repr. 1B, Eye Dam. 1, Skin Sens. 1, STOT SE 3; H360F H318 H317 H335			
109-55-7	3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane			0,15 - 0,25 %

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	203-680-9	612-061-00-6	01-2119486842-27	
	Flam. Liq. 3, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Skin Sens. 1; H226 H311 H302 H314 H317			

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

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 unconscious place in recovery position and seek medical advice.

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

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
Do NOT induce vomiting.

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

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

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

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Carbon monoxide Carbon dioxide (CO₂). Nitrogen oxides (NO_x)

5.3. Advice for firefighters

Special protective equipment for firefighters Protective clothing. In case of fire: Wear self-contained breathing apparatus.

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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

See protective measures under point 7 and 8.

Provide adequate ventilation.

Personal protection equipment: see section 8

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. 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

See protective measures under point 7 and 8.

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

See section 8. Wear personal protection equipment (refer to section 8). Keep container tightly closed.

Advice on protection against fire and explosion

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

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

Oxidising agent

Further information on storage conditions

Keep away from:

Frost

Heat

Humidity

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
		150	560		STEL (15 min)	WEL
108-65-6	1-Methoxypropyl acetate	50	274		TWA (8 h)	WEL
		100	548		STEL (15 min)	WEL
80-05-7	Bisphenol A, inhalable dust	-	10		TWA (8 h)	WEL
71-36-3	Butan-1-ol	50	154		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether			
Worker DNEL, long-term		inhalation	systemic	369 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	43,9 mg/m ³
Worker DNEL, acute		inhalation	local	553,5 mg/m ³
Worker DNEL, acute		inhalation	systemic	553,5 mg/m ³
Worker DNEL, long-term		dermal	systemic	183 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	78 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	33 mg/kg bw/day
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
71-36-3	n-Butanol; Butan-1-ol			
Worker DNEL, long-term		inhalation	local	310 mg/m ³
Consumer DNEL, long-term		inhalation	systemic	55,357 mg/m ³
Consumer DNEL, long-term		inhalation	local	155 mg/m ³
Consumer DNEL, long-term		dermal	systemic	3,125 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	1,562 mg/kg bw/day
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

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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	12,5 mg/kg bw/day
, ,			
100-51-6	benzyl alcohol		
Worker DNEL, long-term	inhalation	systemic	22 mg/m ³
Worker DNEL, acute	inhalation	systemic	110 mg/m ³
Worker DNEL, long-term	dermal	systemic	8 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	40 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	5,4 mg/m ³
Consumer DNEL, acute	inhalation	systemic	27 mg/m ³
Consumer DNEL, long-term	dermal	systemic	4 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	20 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	4 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	20 mg/kg bw/day
, ,			
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol		
Worker DNEL, long-term	inhalation	systemic	2 mg/m ³
Worker DNEL, acute	inhalation	systemic	2 mg/m ³
Worker DNEL, long-term	inhalation	local	2 mg/m ³
Worker DNEL, acute	inhalation	local	2 mg/m ³
Worker DNEL, long-term	dermal	systemic	0,031 mg/kg bw/day
Worker DNEL, acute	dermal	systemic	0,031 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	1 mg/m ³
Consumer DNEL, acute	inhalation	systemic	1 mg/m ³
Consumer DNEL, long-term	inhalation	local	1 mg/m ³
Consumer DNEL, acute	inhalation	local	1 mg/m ³
Consumer DNEL, long-term	dermal	systemic	0,002 mg/kg bw/day
Consumer DNEL, acute	dermal	systemic	0,002 mg/kg bw/day
Consumer DNEL, long-term	oral	systemic	0,004 mg/kg bw/day
Consumer DNEL, acute	oral	systemic	0,004 mg/kg bw/day

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2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine		
Worker DNEL, long-term	inhalation	local	0,073 mg/m ³
Worker DNEL, acute	inhalation	local	0,073 mg/m ³
Consumer DNEL, long-term	oral	systemic	0,526 mg/kg bw/day
109-55-7	3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane		
Worker DNEL, long-term	inhalation	local	1,2 mg/m ³
Worker DNEL, long-term	inhalation	systemic	1,2 mg/m ³
Worker DNEL, acute	inhalation	systemic	9,8 mg/m ³

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PNEC values

CAS No	Substance		Value
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	Environmental compartment	
		Freshwater	10 mg/l
		Freshwater (intermittent releases)	100 mg/l
		Marine water	1 mg/l
		Freshwater sediment	52,3 mg/kg
		Marine sediment	5,2 mg/kg
		Micro-organisms in sewage treatment plants (STP)	100 mg/l
		Soil	4,59 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
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol		
		Freshwater	0,084 mg/l
		Freshwater (intermittent releases)	0,84 mg/l
		Marine water	0,008 mg/l
		Micro-organisms in sewage treatment plants (STP)	0,2 mg/l
71-36-3	n-Butanol; Butan-1-ol		
		Freshwater	0,082 mg/l
		Freshwater (intermittent releases)	2,25 mg/l
		Marine water	0,008 mg/l
		Freshwater sediment	0,324 mg/kg
		Marine sediment	0,032 mg/kg
		Micro-organisms in sewage treatment plants (STP)	2476 mg/l
		Soil	0,017 mg/kg
1330-20-7	xylene		
		Freshwater	0,327 mg/l
		Freshwater (intermittent releases)	0,327 mg/l
		Marine water	0,327 mg/l

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Freshwater sediment	12,46 mg/kg
Marine sediment	12,46 mg/kg
Micro-organisms in sewage treatment plants (STP)	6,58 mg/l
Soil	2,31 mg/kg
100-51-6	benzyl alcohol
Freshwater	1 mg/l
Freshwater (intermittent releases)	2,3 mg/l
Marine water	0,1 mg/l
Freshwater sediment	5,27 mg/kg
Marine sediment	0,527 mg/kg
Micro-organisms in sewage treatment plants (STP)	39 mg/l
Soil	0,456 mg/kg
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol
Freshwater	0,018 mg/l
Freshwater (intermittent releases)	0,011 mg/l
Marine water	0,018 mg/l
Freshwater sediment	1,2 mg/kg
Marine sediment	0,24 mg/kg
Micro-organisms in sewage treatment plants (STP)	320 mg/l
Soil	3,7 mg/kg
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine
Freshwater	0,06 mg/l
Freshwater (intermittent releases)	0,23 mg/l
Marine water	0,006 mg/l
Freshwater sediment	5,784 mg/kg
Marine sediment	0,578 mg/kg
Micro-organisms in sewage treatment plants (STP)	3,18 mg/l
Soil	1,121 mg/kg
109-55-7	3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane
Freshwater	0,073 mg/l
Freshwater (intermittent releases)	0,34 mg/l
Marine water	0,007 mg/l
Freshwater sediment	0,735 mg/kg
Marine sediment	0,073 mg/kg
Micro-organisms in sewage treatment plants (STP)	69,5 mg/l
Soil	0,104 mg/kg

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8.2. Exposure controls

Appropriate engineering controls

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

Protective and hygiene measures

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.

When using do not eat, drink, smoke, sniff.

Eye/face protection

goggles

Hand protection

Tested protective gloves must be worn: EN ISO 374

NBR (Nitrile rubber), Butyl caoutchouc (butyl rubber)

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

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

Protective clothing

Respiratory protection

Usually no personal respirative protection necessary.

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

Combination filtering device (EN 14387) ABEK-P2

Self-contained respirator (breathing apparatus) (DIN EN 133)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	various	
Odour:	characteristic	
pH-Value:		No data available

Changes in the physical state

Melting point:	No data available
Initial boiling point and boiling range:	137 - 143 °C
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available

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Flash point: 30 °C

Flammability

Solid: No data available

Gas: No data available

Explosive properties

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Lower explosion limits: 2,3 vol. %

Upper explosion limits: ~20 vol. %

Ignition temperature: 270 °C

Auto-ignition temperature

Solid: No data available

Gas: No data available

Decomposition temperature: No data available

Oxidizing properties

Not oxidising.

Vapour pressure:
(at 20 °C) 12 hPa

Density (at 20 °C): 0,967 g/cm³

Water solubility: No data available

Solubility in other solvents

No information available.

Partition coefficient: No data available

Viscosity / dynamic: No data available

Viscosity / kinematic: 100 mm²/s

Vapour density: No data available

Evaporation rate: No data available

Solvent content: 44,6

9.2. Other information

Solid content: 61,8

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable under storage at normal ambient temperatures.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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No information available.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.

ATEmix calculated

ATE (inhalation vapour) 15,28 mg/l; ATE (inhalation aerosol) 2,419 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether				
	oral	LD50 4277 mg/kg	Rat	Study report (1985)	EU Method B.1
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1985)	EU Method B.3
	inhalation (4 h) vapour	LC50 >20 mg/l	Rat		
	inhalation aerosol	ATE 0,5 mg/l			
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol				
	oral	LD50 2169 mg/kg	Rat	Study report (1992)	OECD Guideline 401
71-36-3	n-Butanol; Butan-1-ol				
	oral	LD50 ca. 2292 mg/kg	Rat	Study report (1967)	OECD Guideline 401
	dermal	LD50 ca. 3430 mg/kg	Rabbit	Study report (1951)	OECD Guideline 402
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) aerosol	LC50 >23,878 mg/l	Rat		
1330-20-7	xylene				
	oral	LD50 3523 mg/kg	Rat	Study report (1986)	EU Method B.1
	dermal	LD50 12126 mg/kg	Rabbit	Publication (1962)	Single dermal dose under occlusion follo
	inhalation (4 h) vapour	LC50 6700 mg/l	Rat	Toxicol Appl Pharmacol 33:543-558. (1975)	EU Method B.2
	inhalation aerosol	ATE 1,5 mg/l			
100-51-6	benzyl alcohol				
	oral	LD50 1580 mg/kg	Mouse	Cosmet. Toxicol. 11, 1011-1013 (1973) (1)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rabbit	Raw Material Data Handbook, Vol.1:(Orga	EPA OTS 798.1100
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 >4,178 mg/l	Rat	ECHA	OECD 403

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2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine				
	oral	LD50 mg/kg	1030	Rat	Study report (1965) OECD Guideline 401
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2010) OECD Guideline 402
	inhalation (4 h) aerosol	LC50 mg/l	>5,01	Rat	
112-24-3	3,6-diazaoctanethylenediamin; triethylenetetramine				
	oral	LD50 mg/kg	2500	Rat	
	dermal	LD50 mg/kg	805	Rabbit	
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol				
	oral	LD50 mg/kg	5200	Mouse	Study report (1982) This was an acute oral toxicity test wit
	dermal	LD50 mg/kg	ca. 3000	Rabbit	Study report (1948) Acute toxicity by skin penetration
109-55-7	3-aminopropyldimethylamine, N,N-dimethyl-1,3-diaminopropane				
	oral	LD50 mg/kg	377,1	Rat	Study report (1993) OECD Guideline 401
	dermal	LD50 mg/kg	> 400 - < 2000	Rat	Study report (1993) OECD Guideline 402
	inhalation (4 h) vapour	LC50 mg/l	> 4,31	Rat	Study report (1991) OECD Guideline 403

Irritation and corrosivity

Causes severe skin burns and eye damage.
Causes serious eye damage.

Sensitising effects

May cause an allergic skin reaction. (Fatty acids C18 unsaturated, reaction products with triethylenetetramine; Bisphenol A; 4,4'-isopropylidenediphenol; 3-aminomethyl-3,5,5-trimethylcyclohexylamine; 3,6-diazaoctanethylenediamin; triethylenetetramine; 3-aminopropyldimethylamine, N,N-dimethyl-1,3-diaminopropane)

Carcinogenic/mutagenic/toxic effects for reproduction

May damage fertility. (Bisphenol A; 4,4'-isopropylidenediphenol)
Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness.

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.

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SECTION 12: Ecological information

12.1. Toxicity

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether					
	Acute fish toxicity	LC50 > 4600 - < 10000 mg/l	96 h	Leuciscus idus	Study report (1989)	other: DIN 38 412, part L15
	Acute algae toxicity	ErC50 > 1000 mg/l	96 h	Pseudokirchneriella subcapitata	Study report (1986)	OECD Guideline 201
	Acute crustacea toxicity	EC50 21100 - 25900 mg/l	48 h	Daphnia magna	Study report (1981)	other: Environmental Sciences Research T
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol					
	Acute fish toxicity	LC50 175 mg/l	96 h	Cyprinus carpio	Study report (1973)	other: Fish Bioassay Procedure in 1970 e
	Acute algae toxicity	ErC50 84 mg/l	72 h	Desmodesmus subspicatus	Study report (2004)	OECD Guideline 201
71-36-3	n-Butanol; Butan-1-ol					
	Acute fish toxicity	LC50 1376 mg/l	96 h	Pimephales promelas	Study report (1998)	OECD Guideline 203
	Acute algae toxicity	ErC50 225 mg/l	96 h	Pseudokirchneriella subcapitata	Study report (1998)	OECD Guideline 201
	Acute crustacea toxicity	EC50 1328 mg/l	48 h	Daphnia magna	Study report (1998)	OECD Guideline 202
	Crustacea toxicity	NOEC 4,1 mg/l	21 d	Daphnia magna	Study report (1996)	OECD Guideline 211
108-65-6	2-methoxy-1-methylethyl acetate					
	Acute fish toxicity	LC50 100 - 180 mg/l	96 h	Oncorhynchus mykiss	Study report (1987)	OECD Guideline 203
	Acute algae toxicity	ErC50 > 1000 mg/l	96 h	Pseudokirchneriella subcapitata	Study report (1986)	OECD Guideline 201
	Acute crustacea toxicity	EC50 > 500 mg/l	48 h	Daphnia magna	Study report (1987)	EU Method C.2
	Fish toxicity	NOEC 47,5 mg/l	14 d	Oryzias latipes	Study report (1998)	OECD Guideline 204
	Crustacea toxicity	NOEC >= 100 mg/l	21 d	Daphnia magna	Study report (1998)	OECD Guideline 211
1330-20-7	xylene					
	Acute fish toxicity	LC50 8,4 mg/l	96 h	Oncorhynchus mykiss	Ecotoxicology and Environmental Safety.	OECD Guideline 203

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	Acute algae toxicity	ErC50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	Ecotoxicology and Environmental Safety.	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 3,4	48 h	Ceriodaphnia dubia	Ecotoxicology and Environmental Safety 3	other: US EPA 600/4-91-003
	Fish toxicity	NOEC mg/l	> 1,3	56 d	Oncorhynchus mykiss	Appl. Sci. Branch, Eng. Res. Cent. Denve	Fish were exposed in artificial streams
	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	(> 175 mg/l)		0,5 h	Activated sludge	Research Journal WPCF 60(10) 1850-1856 (OECD Guideline 209
100-51-6	benzyl alcohol						
	Acute fish toxicity	LC50 mg/l	> 100	96 h	Oryzias latipes	Review article or handbook (2009)	OECD Guideline 203
	Acute algae toxicity	ErC50	770 mg/l	72 h	Pseudokirchneriella subcapitata	Review article or handbook (2009)	OECD Guideline 201
	Acute crustacea toxicity	EC50	230 mg/l	48 h	Daphnia magna	Review article or handbook (2009)	OECD Guideline 202
	Fish toxicity	NOEC mg/l	48,897	30 d	Fish species	http://epa.gov/oppt/exposure/pubs/episui	other: QSAR
	Algae toxicity	NOEC	51 mg/l	3 d			
	Crustacea toxicity	NOEC	51 mg/l	21 d	Daphnia magna	Review article or handbook (2009)	OECD Guideline 211
	Acute bacteria toxicity	(1385 mg/l)		3 h	activated sludge, domestic	Study report (1989)	OECD Guideline 209
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine						
	Acute fish toxicity	LC50	110 mg/l	96 h	Leuciscus idus	Study report (1993)	EU Method C.1
	Acute algae toxicity	ErC50	37 mg/l	72 h	Desmodesmus subspicatus	Study report (1993)	EU Method C.3
	Acute crustacea toxicity	EC50	23 mg/l	48 h	Daphnia magna	Study report (2002)	OECD Guideline 202
	Crustacea toxicity	NOEC	3 mg/l	21 d	Daphnia magna	Study report (1993)	other: OECD 202, part 2
112-24-3	3,6-diazaoctanethylenediamin; triethylenetetramine						
	Acute algae toxicity	ErC50 mg/l	> 100	72 h			
	Acute crustacea toxicity	EC50	92 mg/l	48 h	Daphnia magna		
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol						

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	Acute fish toxicity	LC50	11 mg/l	96 h	Cyprinodon variegatus	Study report (2009)	OECD Guideline 203
	Acute algae toxicity	ErC50	2,73 - 3,1 mg/l	96 h	Pseudokirchneriella subcapitata	Study report (1985)	Method: Conforms to procedures described
	Acute crustacea toxicity	EC50	10,2 mg/l	48 h	Daphnia magna	Study report (1985)	other: E07-04, ASTM E-35.21
	Fish toxicity	NOEC	0,16 mg/l	164 d	Pimephales promelas	Study report (2008)	EPA OPP 72-5
	Crustacea toxicity	NOEC	> 3,16 mg/l	21 d	Daphnia magna	Publication (1998)	OECD Guideline 211
109-55-7	3-aminopropyldimethylamine, N,N-dimethyl-1,3-diaminopropane						
	Acute fish toxicity	LC50	122 mg/l	96 h	Leuciscus idus melanotus	Study report (1980)	OECD Guideline 203
	Acute algae toxicity	ErC50	34 mg/l	72 h	Pseudokirchneriella subcapitata	Study report (2000)	OECD Guideline 201
	Acute crustacea toxicity	EC50	59,46 mg/l	48 h	Daphnia magna	Study report (1988)	EU Method C.2
	Crustacea toxicity	NOEC	3,64 mg/l	22 d	Daphnia magna	Study report (2017)	OECD Guideline 211
	Acute bacteria toxicity	(> 1000 mg/l)		0,5 h	activated sludge, domestic	Study report (2005)	OECD Guideline 209

12.2. Persistence and degradability

No information available.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
100-51-6	benzyl alcohol			
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	95 - 97%	21	
	Readily biodegradable (according to OECD criteria).			
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine			
	OECD 301A/ ISO 7827/ EEC 92/69/V, C.4-A	8 %	28	
	Not readily biodegradable (according to OECD criteria)			

12.3. Bioaccumulative potential

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-98-2	1-methoxy-2-propanol; monopropylene glycol methyl ether	< 1
90-72-2	2,4,6-tris(dimethylaminomethyl)phenol	>= 0,219
71-36-3	n-Butanol; Butan-1-ol	10
108-65-6	2-methoxy-1-methylethyl acetate	1,2
1330-20-7	xylene	3,2
100-51-6	benzyl alcohol	1
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	0,99
112-24-3	3,6-diazaoctanethylenediamin; triethylenetetramine	-1,66
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol	3,4
109-55-7	3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane	-0,352

BCF

CAS No	Chemical name	BCF	Species	Source
71-36-3	n-Butanol; Butan-1-ol	3,16		QSAR (2017)
1330-20-7	xylene	> 5,5 - < 12,2	Oncorhynchus mykiss	Appl. Sci. Branch, E
100-51-6	benzyl alcohol	1,371	QSAR model	http://epa.gov/oppt/
2855-13-2	3-aminomethyl-3,5,5-trimethylcyclohexylamine	3,16	QSAR estimate	Other company data (
80-05-7	Bisphenol A; 4,4'-isopropylidenediphenol	20 - 67	Cyprinus carpio	Ecotoxicol Environ S
109-55-7	3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane	2,3		SAR and QSAR in Envi

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. Other adverse effects

No information available.

SECTION 13: Disposal considerations

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)

14.1. UN number:

UN 3470

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14.2. UN proper shipping name:	PAINT, CORROSIVE, FLAMMABLE
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+3
Classification code:	CF1
Special Provisions:	163 367
Limited quantity:	1 L
Excepted quantity:	E2
Transport category:	2
Hazard No:	83
Tunnel restriction code:	D/E

Other applicable information (land transport)

Exemption: ADR/RID 2.2.3.1.5.1 (<450l)

Inland waterways transport (ADN)

14.1. UN number:	UN 3470
14.2. UN proper shipping name:	PAINT, CORROSIVE, FLAMMABLE
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+3
Classification code:	CF1
Special Provisions:	163 367
Limited quantity:	1 L
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number:	UN 3470
14.2. UN proper shipping name:	PAINT, CORROSIVE, FLAMMABLE
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+3
Special Provisions:	163, 367
Limited quantity:	1 L
Excepted quantity:	E2
EmS:	F-E, S-C
Segregation group:	acids

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 3470
14.2. UN proper shipping name:	PAINT, CORROSIVE, FLAMMABLE
14.3. Transport hazard class(es):	8
14.4. Packing group:	II
Hazard label:	8+3
Special Provisions:	A72 A192

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Limited quantity Passenger:	0.5 L
Passenger LQ:	Y840
Excepted quantity:	E2
IATA-packing instructions - Passenger:	851
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	855
IATA-max. quantity - Cargo:	30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

SECTION 15: Regulatory information

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

EU regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):

Bisphenol A; 4,4'-isopropylidenediphenol

Restrictions on use (REACH, annex XVII):

Entry 3: 2,4,6-tris(dimethylaminomethyl)phenol; 3,6-diazaoctanethylenediamin; triethylenetetramine

Entry 40: n-Butanol; Butan-1-ol

Entry 66: Bisphenol A; 4,4'-isopropylidenediphenol

2004/42/EC (VOC): 44,63

National regulatory information

Employment restrictions:

Observe restrictions to employment for juvenils 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:

1-methoxy-2-propanol; monopropylene glycol methyl ether

2-methoxy-1-methylethyl acetate

2,4,6-tris(dimethylaminomethyl)phenol

n-Butanol; Butan-1-ol

xylene

benzyl alcohol

Fatty acids C18 unsaturated, reaction products with triethylenetetramine

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Bisphenol A; 4,4'-isopropylidenediphenol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
3-aminopropylidimethylamine, N,N-dimethyl-1,3-diaminopropane

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 3,14.

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

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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
Acute Tox. 4; H332	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Repr. 1B; H360F	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
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.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	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.)