

Safety Data Sheet

MAPEFLOOR FINISH 52 W comp.A

Safety Data Sheet dated: 14/06/2022 - version 3



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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFLOOR FINISH 52 W comp.A

Trade code: 903G9990

UFI: J5F4-A038-G001-OCN1

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

Recommended use: Not available

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road

Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Sens. 1A May cause an allergic skin reaction.

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words



Warning

Hazard statements:

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/clothing and eye/face protection.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H - isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

EUH208 Contains 2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Contains:

2-methyl-2H-isothiazol-3-one

Special provisions according to Annex XVII of REACH and subsequent amendments:
None.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEFLOOR FINISH 52 W comp.A

Hazardous components within the meaning of the CLP regulation and related classification:

Concentra tion (%) w/w)	Name	Ident. Numb.	Classification	Registration Number
≥0.25 - <0.49 %	butyltris[(2-ethyl-1-oxohexyl)oxy]stannane	CAS:23850-94-4 EC:245-912-1	Eye Irrit. 2, H319; Skin Corr. 1, H314	
≥0.1 - <0.25 %	dipropyleneglycol methyl ether	CAS:34590-94-8 EC:252-104-2	[1,3,OEL]	01-2119450011-60-xxxx
≥0.016 - <0.025 %	2-methyl-2H-isothiazol-3-one	CAS:2682-20-4 EC:220-239-6 Index:613-326-00-9	Acute Tox. 3, H311 Acute Tox. 3, H301 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Acute Tox. 2, H330 Skin Corr. 1B, H314 Skin Sens. 1A, H317, M-Chronic:1, M-Acute:10, EUH071	
			Specific Concentration Limits: C ≥ 0,0015%: Skin Sens. 1A H317	
≥0.016 - <0.025 %	1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Acute Tox. 4, H302 Skin Sens. 1, H317 Aquatic Chronic 2, H411	
			Specific Concentration Limits: C ≥ 0,05%: Skin Sens. 1 H317	
≥0.005 - <0.01 %	2-(2-butoxyethoxy)ethanol	CAS:112-34-5 EC:203-961-6 Index:603-096-00-8	Eye Irrit. 2, H319	01-2119475104-44-XXXX
≥0.0015 - <0.005 %	formaldehyde	CAS:50-00-0 EC:200-001-8 Index:605-001-00-5	Acute Tox. 3, H311 Acute Tox. 3, H331 Acute Tox. 3, H301 Skin Corr. 1B, H314 Skin Sens. 1, H317 Muta. 2, H341 Carc. 1B, H350	01-2119488953-20-XXXX
			Specific Concentration Limits: 0,2% ≤ C < 100%: Skin Sens. 1 H317 5% ≤ C < 25%: Skin Irrit. 2 H315 5% ≤ C < 25%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335 25% ≤ C < 100%: Skin Corr. 1B H314	
≥0.0015 - <0.005 %	zinc pyrrithione	CAS:13463-41-7 EC:236-671-3 Index:613-333-00-7	Acute Tox. 2, H330 Acute Tox. 3, H301 STOT RE 1, H372 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 Repr. 1B, H360, M-Chronic:10, M-Acute:1000	
			Acute Toxicity Estimate: ATE - Oral: 221mg/kg bw	

≥0.0015 - terbutryn
<0.005 %

CAS:886-50-0
EC:212-950-5

Aquatic Acute 1, H400 Aquatic
Chronic 1, H410 Acute Tox. 4,
H302 Skin Sens. 1B, H317, M-
Chronic:100, M-Acute:100

Specific Concentration Limits:
C ≥ 3%: Skin Sens. 1B H317

<0.0015 % reaction mass of: 5-chloro-2-
methyl-4-isothiazolin-3-one [EC
no. 247-500-7] and 2-methyl-2H -
isothiazol-3-one [EC no. 220-239-
6] (3:1)

CAS:55965-84-9
EC:611-341-5
Index:613-167-
00-5

Aquatic Acute 1, H400 Aquatic
Chronic 1, H410 Acute Tox. 3,
H301 Skin Corr. 1C, H314 Skin
Sens. 1A, H317 Acute Tox. 2,
H310 Acute Tox. 2, H330 Eye
Dam. 1, H318, M-Chronic:100, M-
Acute:100

Specific Concentration Limits:
C ≥ 0,6%: Skin Corr. 1C H314
0,06% ≤ C < 0,6%: Skin Irrit. 2
H315
C ≥ 0,6%: Eye Dam. 1 H318
0,06% ≤ C < 0,6%: Eye Irrit. 2
H319
C ≥ 0,0015%: Skin Sens. 1A H317

<0.0015 % 2-octyl-2H-isothiazol-3-one

CAS:26530-20-1
EC:247-761-7
Index:613-112-
00-5

Acute Tox. 2, H330 Acute Tox. 3,
H311 Acute Tox. 3, H301 Skin
Corr. 1, H314 Eye Dam. 1, H318
Skin Sens. 1A, H317 Aquatic Acute
1, H400 Aquatic Chronic 1, H410,
M-Chronic:100, M-Acute:100,
EUH071

Specific Concentration Limits:
C ≥ 0,0015%: Skin Sens. 1A H317

Acute Toxicity Estimate:
ATE - Oral: 125mg/kg bw
ATE - Dermal: 311mg/kg bw

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Not available

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

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

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
butyltris[(2-ethyl-1-oxohexyl)oxy]stannane CAS: 23850-94-4	EU	ITALY		0,1		0,2			
	ACGIH	UNITED STATES OF AMERICA		0,1		0,2			
dipropyleneglycol methyl ether CAS: 34590-94-8	SUVA			300	50	300	50		
	NDS			240					
	National			303	50	600	100		
	National			300	50	450	75		Short-term value, 15 minutes average value
	National			310	50				hud

	National		300	50			H
	NDSch		480				
	EU		308	50			Skin
	ACGIH			100		150	Skin - Eye and URT irr, CNS impair
	DFG	GERMANY	C		310	50	
	ACGIH			100		150	Skin - potential significant contribution to overall exposure by the cutaneous route;CNS impairment;eye and upper respiratory tract irritation
	National	SWEDEN		300	50		
	National	FRANCE		308	50		
	National	SPAIN		308	50		
	National	GREECE		600	100	900	150
	National	DENMARK		309	50		
	National	FINLAND		310	50		
	National	GERMANY		310	50		
	National	PORTUGAL		308	50		150
	National	NORWAY		300	50	375	75
	National	BELGIUM		308	50		
	NDS	POLAND		240			
	NDSch	POLAND				480	
	CHE	SWITZERLAND				300	50
	NDS	NETHERLANDS		300			
	National	CZECH REPUBLIC		270			
	National	HUNGARY		308			
	Malaysi a OEL	MALAYSIA		606	100		Skin notation
	National	ESTONIA		308	50		
	National	LATVIA		308	50		
	National	CZECH REPUBLIC	C			550	
	National	SLOVAKIA		308	50		
	National	SLOVENIA		308	50		
	National	UNITED KINGDOM		308	50	924	150
	National	BULGARIA		308,0	50		
	National	ROMANIA		308	50		
	TUR	TURKEY		308	50		
	National	LITHUANIA		308	50	450	75
	National	CROATIA		308	50		
	EU			308	50		Indicative Possibility of significant uptake through the skin
	2-methyl-2H-isothiazol-3-one CAS: 2682-20-4	DFG	GERMANY	C		0,4	
		CHE	SWITZERLAND			0,4	
	2-(2-butoxyethoxy)ethanol CAS: 112-34-5	DFG	GERMANY	C		100,5	15
	ACGIH				10		hematologic, kidney and liver effects
	National	SWEDEN		68	10		

formaldehyde CAS: 50-00-0	EU		67,5	10	101,2	15	Indicative
	National FRANCE		68	10	101,2	15	
	National SPAIN		67,5	10	101,2	15	
	National GREECE		67,5	10	101,2	15	
	National DENMARK		68	10			
	National FINLAND		68	10			
	National GERMANY		67	10			
	National PORTUGAL		67,5	10	101,2	15	
	National NORWAY		68	10	102	15	
	National BELGIUM		67,5	10	101,2	15	
	NDS POLAND		67				
	NDSch POLAND				100		
	CHE SWITZERLAND				101	15	
	NDS NETHERLANDS		50		100		
	National CZECH REPUBLIC		100				
	National HUNGARY		67,5		101,2		
	National ESTONIA		67,5	10			
	National LATVIA		67,5	10	101,2	15	
	National CZECH REPUBLIC	C			100		
	National SLOVAKIA	C			101,2		
	National SLOVAKIA		67,5	10			
	National SLOVENIA		67,5	10	101,25	15	
	National UNITED KINGDOM		67,5	10	101,2	15	
	National BULGARIA		67,5	10	101,2	15	
	National ROMANIA		67,5	10	101,2	15	
	TUR TURKEY		67,5	10	101,2	15	
	National LITHUANIA		67,5	10	101,2	15	
	National CROATIA		67,5	10	101,2	15	
	ACGIH	C				0,3	DSEN, RSEN, A2 - URT and eye irr
	DFG GERMANY	C			0,74	0,6	
	ACGIH			0,1		0,3	A1 - Confirmed Human Carcinogen;eye and upper respiratory tract irritation;upper respiratory tract cancer;dermal sensitizer; respiratory sensitizer
	National SWEDEN		0,37	0,3			
	National FRANCE			0,5		1	
	National SPAIN		0,37	0,3	0,74	0,6	
	National GREECE		2,5	2	2,5	2	
	National DENMARK	C			0,4	0,3	
	National FINLAND		0,37	0,3			
	National FINLAND	C			1,2	1	
	National GERMANY		0,37	0,3			
	National NORWAY		0,6	0,5			
	National NORWAY	C			1,2	1	
	NDS POLAND		0,37				
	NDSch POLAND				0,74		
	CHE SWITZERLAND				0,74	0,6	
	NDS NETHERLANDS		0,15		0,5		

National CZECH REPUBLIC		0,5			
National HUNGARY		0,6		0,6	
Malaysi a OEL	MALAYSIA C			0,37	0,3
National PORTUGAL	C				0,3
National ESTONIA		0,6	0,5	1,2	1
National LATVIA		0,5			
National CZECH REPUBLIC	C			1	
National SLOVAKIA	C			0,74	
National SLOVAKIA		0,37	0,3		
National SLOVENIA		0,62	0,5	0,62	0,5
National UNITED KINGDOM		2,5	2	2,5	2
National BULGARIA		1,0		2,0	
National ROMANIA		1,2	1	3	2
National LITHUANIA		0,6	0,5		
National LITHUANIA	C			1,2	1
National CROATIA		2,5	2	2,5	2
EU		0,37	0,3		
2-octyl-2H-isothiazol-3-one CAS: 26530-20-1	DFG GERMANY C			54	10
National GERMANY		0,05			
CHE SWITZERLAND				0,1	
National SLOVENIA		0,05		0,05	

Binding

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
dipropyleneglycol methyl ether CAS: 34590-94-8	19 mg/l	Fresh Water		
	1,9 mg/l	Marine water		
	70,2 mg/kg	Freshwater sediments		
	7,02 mg/kg	Marine water sediments		
	4168 mg/l	Microorganisms in sewage treatments		
	190 mg/l	Intermittent release		
	2,74 mg/kg	Soil		
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	1,1 mg/l	Fresh Water		
	0,11 mg/l	Marine water		
	4,4 mg/kg	Freshwater sediments		
	0,44 mg/kg	Marine water sediments		
	0,32 mg/kg	Soil		
	200 mg/l	Microorganisms in sewage treatments		
	11 mg/l	Intermittent release		
formaldehyde	0,47 mg/l	Fresh Water		

0,47 mg/l	Marine water
4,7 mg/l	Intermittent release
0,19 mg/l	Microorganisms in sewage treatments
2,44 mg/kg	Freshwater sediments
2,44 mg/kg	Marine water sediments
0,21 mg/kg	Soil

Derived No Effect Level. (DNEL)

	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
dipropyleneglycol methyl ether CAS: 34590-94-8	65 mg/kg		15 mg/kg	Human Dermal		Long Term, systemic effects
	310 mg/m3		37,2 mg/m3	Human Inhalation		Long Term, systemic effects
			1,67 mg/kg	Human Oral		Long Term, systemic effects
2-(2-butoxyethoxy)ethanol CAS: 112-34-5	83 mg/kg			Human Dermal		Long Term, systemic effects
	101 mg/m3			Human Inhalation		Short Term, local effects
	67,5 mg/m3			Human Inhalation		Long Term, systemic effects
	67,5 mg/m3			Human Inhalation		Long Term, local effects
formaldehyde CAS: 50-00-0	1 mg/m3			Human Inhalation		Short Term, local effects
	240 mg/kg		102 mg/kg	Human Dermal		Long Term, systemic effects
	9 mg/m3		3,2 mg/m3	Human Inhalation		Long Term, systemic effects
	0,037 mg/cm2		0,012 mg/cm2	Human Dermal		Long Term, local effects
	0,5 mg/m3		0,1 mg/m3	Human Inhalation		Long Term, local effects
			4,1 mg/kg	Human Oral		Long Term, systemic effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user

information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: liquid

Color: white

Odour: Odourless

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available

Flash point: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: 7.50

Viscosity: 1,404.00 cPs

Kinematic viscosity: Not available

Solubility in water: dispersible

Solubility in oil: Not available

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: 1.09 g/cm³

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

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

Toxicological information of the mixture:

a) acute toxicity	Not classified Based on available data, the classification criteria are not met
b) skin corrosion/irritation	Not classified Based on available data, the classification criteria are not met
c) serious eye damage/irritation	Not classified

	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	The product is classified: Skin Sens. 1A(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met
i) STOT-repeated exposure	Not classified
	Based on available data, the classification criteria are not met
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

butyltris[(2-ethyl-1-oxohexyl)oxy]stannane	a) acute toxicity	LD50 Oral Rat = mg/kg LD50 Skin Rabbit > 8000 mg/kg
dipropyleneglycol methyl ether	a) acute toxicity	LD50 Oral Rat > 5000, mg/kg LD50 Skin Rabbit = 9500 mg/kg
2-methyl-2H-isothiazol-3-one	a) acute toxicity	LD50 Oral Rat > 183 mg/kg LD50 Skin Rat = 242 mg/kg LD50 Skin Rabbit = 200 mg/kg LC50 Inhalation Rat = 0,11 mg/l 4h
1,2-benzisothiazol-3-one; 1,2-benzisothiazolin-3-one	a) acute toxicity	LD50 Oral Rat = 670, mg/kg
2-(2-butoxyethoxy)ethanol	a) acute toxicity	LD50 Skin Rabbit = 2700 mg/kg LD50 Oral Rat = 5660 mg/kg
formaldehyde	a) acute toxicity	LD50 Oral Rat = 700 mg/kg LC50 Inhalation Rat = 0,578 mg/l LD50 Skin Rabbit = 270 mg/kg LD50 Skin Rabbit = 270 mg/kg LC50 Inhalation Rat = 0,578 mg/l 4h LD50 Oral Rat = 100 mg/kg
zinc pyrithione	a) acute toxicity	ATE - Oral : 221 mg/kg bw LD50 Skin Rabbit = 100 mg/kg LD50 Oral Rat = 177 mg/kg LC50 Inhalation Rat 0,05 mg/l 4h LD50 Skin Rabbit = 100 mg/kg
terbutryn	a) acute toxicity	LD50 Skin Rabbit > 10200 mg/kg LC50 Inhalation Rat > 8 g/m3 4h LD50 Oral Rat = 2045 mg/kg LD50 Skin Rabbit > 10200 mg/kg

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

a) acute toxicity

LC50 Inhalation Rat = 2,36 mg/l 4h

LD50 Skin Rabbit = 660, mg/kg
LD50 Oral Rat = 53, mg/kg

2-octyl-2H-isothiazol-3-one

a) acute toxicity

ATE - Oral : 125 mg/kg bw

ATE - Dermal : 311 mg/kg bw
LD50 Oral Rat = 318 mg/kg
LD50 Skin Rabbit = 311 mg/kg
LC50 Inhalation Dust Rat = 0,58 mg/l 4h

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

List of Eco-Toxicological properties of the product

The product is classified: Aquatic Chronic 3(H412)

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
dipropyleneglycol methyl ether	CAS: 34590-94-8 - EINECS: 252-104-2	a) Aquatic acute toxicity : LC50 Fish Pimephales promelas > 10000 mg/L 96h a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 1919 mg/L 48h IUCLID
2-methyl-2H-isothiazol-3-one	CAS: 2682-20-4 - EINECS: 220-239-6 - INDEX: 613-326-00-9	a) Aquatic acute toxicity : LC50 Fish = 4,77 mg/L 96h a) Aquatic acute toxicity : LC50 Daphnia = 0,93 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 0,072 mg/L 72h b) Aquatic chronic toxicity : NOEC Daphnia = 0,044 mg/L 21d
1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Aquatic acute toxicity : LC50 Fish = 2,15 mg/L b) Aquatic chronic toxicity : NOEC Algae = 0,0403 mg/L 72h b) Aquatic chronic toxicity : EC50 Algae = 0,11 mg/L 72h b) Aquatic chronic toxicity : EC10 Algae = 0,04 mg/L 72h b) Aquatic chronic toxicity : EC50 Daphnia = 3,27 mg/L 48h NOEC Daphnia = 1,2 mg/L 21d
2-(2-butoxyethoxy)ethanol	CAS: 112-34-5 - EINECS: 203-961-6 - INDEX: 603-096-00-8	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1300 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 100 mg/L 48h IUCLID

		a) Aquatic acute toxicity : EC50 Algae <i>Desmodesmus subspicatus</i> > 100 mg/L 96h IUCLID
formaldehyde	CAS: 50-00-0 - EINECS: 200-001-8 - INDEX: 605-001-00-5	a) Aquatic acute toxicity : LC50 Fish = 41 mg/L 96 a) Aquatic acute toxicity : EC50 <i>Daphnia</i> = 42 mg/L 24 a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> 22,6 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish <i>Lepomis macrochirus</i> = 1510 µg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish <i>Brachydanio rerio</i> = 41 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> 0,032 mL/L 96h EPA a) Aquatic acute toxicity : LC50 Fish <i>Oncorhynchus mykiss</i> 100 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish <i>Pimephales promelas</i> 23,2 mg/L 96h EPA a) Aquatic acute toxicity : LC50 <i>Daphnia magna</i> = 2 mg/L 48h IUCLID
zinc pyrrhione	CAS: 13463-41-7 - EINECS: 236-671-3 - INDEX: 613-333-00-7	a) Aquatic acute toxicity : EC50 <i>Daphnia magna</i> 11,3 mg/L 48h EPA G : LD50 Avian <i>Colinus virginianus</i> = 64 mg/kg NZ_CCID
terbutryn	CAS: 886-50-0 - EINECS: 212-950-5	a) Aquatic acute toxicity : EC50 <i>Daphnia</i> = 6,4 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 0,0067 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 1,9 mg/L 96 b) Aquatic chronic toxicity : NOEC <i>Daphnia</i> = 0,05 mg/L - 21d b) Aquatic chronic toxicity : NOEC Fish = 0,073 mg/L - 28d
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	CAS: 55965-84-9 - EINECS: 611-341-5 - INDEX: 613-167-00-5	a) Aquatic acute toxicity : EC50 <i>Daphnia</i> = 0,12 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 0,22 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 0,048 mg/L 72 b) Aquatic chronic toxicity : NOEC Algae = 0,0012 mg/L 72 b) Aquatic chronic toxicity : NOEC Fish = 0,098 mg/L - 28 d b) Aquatic chronic toxicity : NOEC <i>Daphnia</i> = 0,004 mg/L - 21 d
2-octyl-2H-isothiazol-3-one	CAS: 26530-20-1 - EINECS: 247-761-7 - INDEX: 613-112-00-5	a) Aquatic acute toxicity : EC50 <i>Daphnia</i> = 0,42 mg/L 48 a) Aquatic acute toxicity : EC50 Algae = 0,084 mg/L 72 a) Aquatic acute toxicity : LC50 Fish = 0,036 mg/L 96 a) Aquatic acute toxicity : LC50 Fish = 0,18 mg/L 96 b) Aquatic chronic toxicity : NOEC <i>Daphnia</i> = 0,002 mg/L - 21 d b) Aquatic chronic toxicity : NOEC Fish = 0,022 mg/L - 28 d b) Aquatic chronic toxicity : NOEC Algae = 0,004 mg/L 72

12.2. Persistence and degradability

Component	Persitence/Degradability:
dipropyleneglycol methyl ether	Readily biodegradable

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration $\geq 0.1\%$.

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

12.7 Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID) :

ADR-Hazard identification number: NA

Not Applicable

Air (IATA) :

Not Applicable

Sea (IMDG) :

Not Applicable

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

VOC (2004/42/EC) : max 0,1 (A+B) g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EU) n. 2020/878
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 28, 55, 72, 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

MAL-kode: 1-3 (1993) "Produktet indeholder lavtkogende væsker, der adsorberes dårligt på kulfiltre. Anvend derfor friskluftforsynet åndedrætsværn."

A+B: 5-3 (1993)

German Water Hazard Class (WGK)

Class 1: slightly hazardous for water.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
EUH071	Corrosive to the respiratory tract.
H301	Toxic if swallowed.
H311	Toxic 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.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
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.

Code	Hazard class and hazard category	Description
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2

3.1/3/Dermal	Acute Tox. 3	Acute toxicity (dermal), Category 3
3.1/3/Inhal	Acute Tox. 3	Acute toxicity (inhalation), Category 3
3.1/3/Oral	Acute Tox. 3	Acute toxicity (oral), Category 3
3.2/1	Skin Corr. 1	Skin corrosion, Category 1
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.4.2/1A	Skin Sens. 1A	Skin Sensitisation, Category 1A
3.5/2	Muta. 2	Germ cell mutagenicity, Category 2
3.6/1B	Carc. 1B	Carcinogenicity, Category 1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, category 1
4.1/C3	Aquatic Chronic 3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008 Classification procedure

3.4.2/1A	Calculation method
4.1/C3	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute toxicity Estimate (Mixtures)

BCF: Biological Concentration Factor

BEI: Biological Exposure Index

BOD: Biochemical Oxygen Demand

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CAV: Poison Center

CE: European Community

CLP: Classification, Labeling, Packaging.

CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand

COV: Volatile Organic Compound

CSA: Chemical Safety Assessment

CSR: Chemical Safety Report

DMEL: Derived Minimal Effect Level

DNEL: Derived No Effect Level.

DPD: Dangerous Preparations Directive

DSD: Dangerous Substances Directive

EC50: Half Maximal Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances.

ES: Exposure Scenario

GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

*** Sheet model entirely changed in compliance to regulatory update.**