

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

1.1. Product identifier

Mixture identification:

Trade name: MAPEPRIM SP comp.A

Trade code: 901541

UFI: 2SP4-C0HK-R002-VRGS

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

Recommended use: Water-borne synthetic resin based primer

Uses advised against: 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 Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
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:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261	Avoid breathing mist/vapours/spray.
P264	Wash hands thoroughly after handling.
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.
P337+P313	If eye irritation persists: Get medical advice/attention.

Special Provisions:

EUH208 Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700). May produce an allergic reaction.

EUH208	Contains oxirane, mono[(C12-14-alkyloxy)methyl] derivs.. May produce an allergic reaction.
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.
EUH205	Contains epoxy constituents. May produce an allergic reaction.

Contains:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol

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 $\geq 0.1\%$.

Other Hazards: No other hazards

This preparation contains low molecular weight epoxy resins. Cross sensitisation to other epoxies is possible. Avoid also exposure to spray mist and vapour.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEPRIM SP comp.A

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

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
$\geq 5 - < 10$ %	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	CAS:1675-54-3, 25068-38-6, 25085-99-8 EC:216-823-5 Index:603-073-00-2	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 Aquatic Chronic 2, H411 Specific Concentration Limits: C $\geq 5\%$: Skin Irrit. 2 H315 C $\geq 5\%$: Eye Irrit. 2 H319	01-2119456619-26
$\geq 1 - < 2.5$ %	Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS:9003-36-5 EC:500-006-8	Skin Irrit. 2, H315; Skin Sens. 1A, H317; Aquatic Chronic 2, H411	01-2119454392-40-XXXX
$\geq 1 - < 2.5$ %	oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS:68609-97-2 EC:271-846-8 Index:603-103-00-4	Skin Irrit. 2, H315; Skin Sens. 1B, H317	01-2119485289-22-XXXX
$\geq 0.1 - < 0.25$ %	ethylene glycol	CAS:107-21-1 EC:203-473-3 Index:603-027-00-1	Acute Tox. 4, H302; STOT RE 2, H373	01-2119456816-28-xxxx
$\geq 0.016 - < 0.025$ %	ethylene glycol monobutyl ether	CAS:111-76-2 EC:203-905-0 Index:603-014-00-0	Acute Tox. 4, H332 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Toxicity Estimate: ATE - Oral: 1200mg/kg bw	01-2119475108-36-XXXX
$\geq 0.005 - < 0.01$ %	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 $\geq 0,05\%$: Skin Sens. 1 H317	

<p>≥0.005 - formaldehyde <0.01 %</p>	<p>CAS:50-00-0 EC:200-001-8 Index:605-001-00-5</p>	<p>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</p>	<p>01-2119488953-20-XXXX</p>
---	--	---	------------------------------

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

<p><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)</p>	<p>CAS:55965-84-9 EC:611-341-5 Index:613-167-00-5</p>	<p>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</p>
---	---	--

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

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.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

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

Protect uninjured eye.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
ethylene glycol CAS: 107-21-1	National	SWEDEN		25	10	50	20		SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		50	20	100	40		FINLAND, hud
	National	NORWAY		52	20	104	40		NORWAY, H5
	EU			52	20	104	40		Skin
	National	NORWAY		10	10	20	20		
	ACGIH		C			100			(H), A4 - URT and eye irr
	DFG	GERMANY	C			52	20		
	ACGIH				25	10	50		A4 - Not Classifiable as a Human Carcinogen; upper respiratory tract irritation
	National	SWEDEN			25	10			
	National	FRANCE			52	20	104	40	
	National	SPAIN			52	20	104	40	
	National	GREECE			125	50	125	50	
National	DENMARK			26	10				

National FINLAND	50	20	100	40
National PORTUGAL	52	20	104	40
NDS POLAND	15			
NDSch POLAND			50	
National PORTUGAL C			100	
CHE SWITZERLAND			52	20
NDS NETHERLANDS	52		104	
National GERMANY	26	10		
National CZECH REPUBLIC	50			
National HUNGARY	52		104	
National SLOVAKIA	52	20		
National SLOVENIA	52	20	104	40
National UNITED KINGDOM	10	20	104	40
Malaysi a OEL MALAYSIA C			100	39,4
National ESTONIA	52	20	104	40
National LATVIA	52	20	104	40
National CZECH REPUBLIC C			100	
National SLOVAKIA C			104	
National CROATIA	52	20	104	40
EU	52	20	104	40
National BULGARIA	52	20	104	40
National ROMANIA	52	20	104	40
TUR TURKEY	52	20	104	40
National LITHUANIA	25	10	50	20
ethylene glycol monobutyl ether CAS: 111-76-2	DFG GERMANY C		98	20
ACGIH		20		
National SWEDEN	50	10		
National FRANCE	49	10	246	50
National SPAIN	98	20	245	50
National GREECE	120	25		
National DENMARK	98	20		
National FINLAND	98	20	250	50
National GERMANY	49	10		
National PORTUGAL	98	20	246	50
National NORWAY	50	10	75	15
National BELGIUM	98	20	246	50
NDS POLAND	98			
NDSch POLAND			200	
CHE SWITZERLAND			98	20
NDS NETHERLANDS	100		246	
National CZECH REPUBLIC	100			
National HUNGARY	98		246	
Malaysi MALAYSIA	96,7	20		

Indicative Possibility of significant uptake through the skin

A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans; eye and upper respiratory tract irritation;

Skin notation;

a OEL

National ESTONIA			98	20	246	50
National LATVIA			98	20	246	50
National CZECH REPUBLIC	C				200	
National SLOVAKIA	C				246	
National SLOVAKIA			98	20		
National SLOVENIA			98	20	245	50
National UNITED KINGDOM			123	25	246	50
National BULGARIA			98	20	246	50
National ROMANIA			98	20	246	50
TUR TURKEY			98	20	246	50
National LITHUANIA			50	10	100	20
National CROATIA			98	20	246	50
EU			98	20	246	50
ACGIH	C					0,3
DFG GERMANY	C				0,74	0,6
ACGIH				0,1		0,3
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			2,5	2	2,5	2

formaldehyde
CAS: 50-00-0

Indicative Possibility of significant uptake through the skin;
DSEN, RSEN, A2 - URT and eye irr

A1 - Confirmed Human Carcinogen; eye and upper respiratory tract irritation; upper respiratory tract cancer; dermal sensitizer; respiratory sensitizer

KINGDOM

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		Binding

Biological Exposure Index

	Value	UoM	Medium	Biological Indicator	Sampling Period
ethylene glycol monobutyl ether CAS: 111-76-2	200	MGGCREAT	Urine	Butoxyacetic acid (BAA)	End of turn

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol CAS: 9003-36-5	10 mg/l	Microorganisms in sewage treatments		
	0,003 mg/l	Fresh Water		
	0,294 mg/kg	Freshwater sediments		
	0,0003 mg/l	Marine water		
	0,0294 mg/kg	Marine water sediments		
	0,237 mg/kg	Soil		
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. CAS: 68609-97-2	0,00072 mg/l	Marine water		
	0,0072 mg/l	Fresh Water		
	66,77 mg/kg	Freshwater sediments		
	6,677 mg/kg	Marine water sediments		
	80,12 mg/kg	Soil		
	10 mg/l	Microorganisms in sewage treatments		
ethylene glycol CAS: 107-21-1	10 mg/l	Fresh Water		
	1 mg/l	Marine water		
	1,53 mg/kg	Soil		
	37 mg/kg	Freshwater sediments		
	10 mg/l	Intermittent release		
	199,5 mg/l	Microorganisms in sewage treatments		
	3,7 mg/kg	Marine water sediments		
formaldehyde CAS: 50-00-0	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
ethylene glycol CAS: 107-21-1	106 mg/kg		53 mg/kg	Human Dermal	Long Term, systemic effects	
			53 mg/kg	Human Oral	Long Term, systemic effects	
	35 mg/m3		7 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 $\geq 0,5$ mm; breakthrough time ≥ 480 min.

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

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

Fluorinated rubber - FKM: thickness $\geq 0,4$ mm; breakthrough time ≥ 480 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.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

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: paste
Color: Blue
Odour: Characteristic
Odour threshold: Not available
Melting point / freezing point: Not available
Initial boiling point and boiling range: 100 °C (212 °F)
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: 6.50
Viscosity: 20,000.00 cPs
Kinematic viscosity: Not available
Solubility in water: dispersible
Solubility in oil: insoluble
Partition coefficient (n-octanol/water): Not available
Vapour pressure: Not available
Relative density: 1.20 g/cm³
Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available
Conductivity: Not available
Explosive properties: ==
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 | The product is classified: Skin Irrit. 2(H315) |
| c) serious eye damage/irritation | The product is classified: Eye Irrit. 2(H319) |
| 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

Based on available data, the classification criteria are not met

Not classified

Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Skin Rabbit = 20 mg/kg LD50 Oral Rat = 11300 µL/kg LD50 Skin Rabbit = 20000 mg/kg
Formaldehyde, oligomeric reaction products with 1- chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000, mg/kg LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
oxirane, mono[(C12-14- alkyloxy)methyl] derivs.	a) acute toxicity	LD50 Oral Rat = 19200 mg/kg LD50 Skin Rabbit = 4000, mg/kg
ethylene glycol	a) acute toxicity	LC50 Inhalation Rat > 2,5 mg/l 6h LD50 Skin Rat > 3500, mg/kg
ethylene glycol monobutyl ether	a) acute toxicity	ATE - Oral : 1200 mg/kg bw LD50 Oral Guineapig = 1414, mg/kg
1,2-benzisothiazol-3(2H)- one; 1,2-benzisothiazolin- 3-one	a) acute toxicity	LD50 Oral Rat = 670, 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
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

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 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
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	CAS: 9003-36-5 - EINECS: 500-006-8	a) Aquatic acute toxicity : LC50 Fish = 5,7 mg/L 96h a) Aquatic acute toxicity : EC50 Daphnia = 2,55 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 1,8 mg/L 72h
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	CAS: 68609-97-2 - EINECS: 271-846-8 - INDEX: 603-103-00-4	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96h a) Aquatic acute toxicity : EL50 Daphnia = 7,2 mg/L 48h a) Aquatic acute toxicity : EC50 Algae = 843 mg/L 72h b) Aquatic chronic toxicity : NOEC Algae = 500 mg/L 72h
ethylene glycol	CAS: 107-21-1 - EINECS: 203-473-3 - INDEX: 603-027-00-1	a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48 a) Aquatic acute toxicity : EC50 Algae > 100 mg/L 96 a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 b) Aquatic chronic toxicity : NOEC Fish > 100 mg/L - 7 d b) Aquatic chronic toxicity : NOEC Daphnia > 100 mg/L - 7 d b) Aquatic chronic toxicity : NOEC Algae > 100 mg/L 72 a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 41000 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 14 mL/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 27540 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 40761 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 40000 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 16000 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 46300 mg/L 48h IUCLID a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 6500 mg/L 96h IUCLID
ethylene glycol monobutyl ether	CAS: 111-76-2 - EINECS: 203-905-0 - INDEX: 603-014-00-0	a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1490 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 1000 mg/L 48h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 2950 mg/L 96h IUCLID
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
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 Daphnia = 42 mg/L 24
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 22,6 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 1510 µg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 41 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 0,032 mL/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 100 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,2 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Daphnia Daphnia magna = 2 mg/L 48h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 11,3 mg/L 48h EPA
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 Daphnia = 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 Daphnia = 0,004 mg/L - 21 d

12.2. Persistence and degradability

Component	Persistence/Degradability:
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Readily biodegradable

12.3. Bioaccumulative potential

Component	Bioaccumulation
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	Not bioaccumulative

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) : 5,6 (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, 72, 75

SVHC Substances:

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

German Water Hazard Class (WGK)

Class 2: 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
H301	Toxic if swallowed.
H302	Harmful 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.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/3/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
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
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
3.4.2/1B	Skin Sens. 1B	Skin Sensitisation, Category 1B
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
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/C2	Aquatic Chronic 2	Chronic (long term) aquatic hazard, category 2
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

3.2/2	Calculation method
3.3/2	Calculation method
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.**