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

1.1. Product identifier

Mixture identification:

Trade name: MAPEPOXY LR COMP A

Trade code: 9025132

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

Recommended use: Epoxy resins

Uses advised against: N.A.

1.3. Details of the supplier of the safety data sheet

Company: MAPEI AS - Vallsetvegen, 6 - 2120 Sagstua - Norway

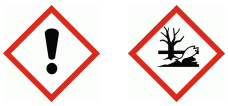
phone: +47-62972000 - fax: +47-62972099 - www.mapei.no (office hours)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

Giftinformasjonen – phone number: +47 22591300

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 2	Toxic 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.
H411	Toxic 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.
P391	Collect spillage.

Special Provisions:

EUH208	Contains reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700). May produce an allergic reaction.
EUH208	Contains 1,6-Hexanediol Diglycidyl Ether. 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 Ingredients are present

Other Hazards: No other hazards

This product contains crystalline silica (quartz sand). IARC has classified crystalline silica as a Group 1 carcinogen. Both IARC and NTP consider silica as a known human carcinogen. Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. Because this product is in liquid or paste form, it does not pose a dust hazard; therefore, this classification is not relevant. (Note: sanding of the hardened product may create a silica dust hazard)

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

N.A.

3.2. Mixtures

Mixture identification: MAPEPOXY LR COMP A

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

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥20 - <25 %	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
≥5 - <10 %	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8	Eye Irrit. 2, H319 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411 Specific Concentration Limits: 5% ≤ C < 100%: Skin Irrit. 2 H315 5% ≤ C < 100%: Eye Irrit. 2 H319	01-2119456619-26-XXXX
≥5 - <10 %	1,6-Hexanediol Diglycidyl Ether	CAS:933999-84-9, 16096-31-4 EC:618-939-5	Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317; Aquatic Chronic 3, H412	01-2119463471-41-0005
≥1 - <2.5 %	free crystalline silica (Ø <10 µ)	CAS:14808-60-7 EC:238-878-4	STOT RE 1, H372	
≥0.005 - <0.01 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226	01-2119475791-29-XXXX

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 opthalmologist 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 (CO_2).

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

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	National	BULGARIA		1.0					
free crystalline silica (Ø <10 µ)	National	SWEDEN		0.100					SWEDEN, respirable aerosol
	National	NORWAY		0.100					K: Chemicals to be treated as carcinogenic.
	NDS	POLAND		2.000					frakcja wdychalna
	NDS	POLAND		0.300					frakcja respirabilna
	National	DENMARK		0.3		0.600			DENMARK, inhalable aerosol inhalable aerosol
	National	DENMARK		0.100		0.200			DENMARK, respirable aerosol respirable aerosol
	ACGIH	None		0.025					(R), A2 - Pulm fibrosis, lung cancer
	EU	None		0.025					A2 (R) - Pulm fibrosis, lung cancer
	National	AUSTRIA		0.150					A*
	ACGIH			0.025					A2 - Suspected Human Carcinogen;lung cancer;pulmonary fibrosis
	National	SWEDEN		0.1					
	National	FRANCE		0.1					
	National	SPAIN		0.05					
	National	DENMARK		0.3					
	National	DENMARK		0.1					
	National	FINLAND		0.05					
	National	PORTUGAL		0.025					
	National	NORWAY		0.3		0.9			
	National	NORWAY		0.1		0.9			
	National	BELGIUM		0.1					
	NDS	POLAND		0.1					
	NDS	NETHERLANDS		0.075					
	National	CZECH REPUBLIC		0.1					
	National	HUNGARY		0.15					
	Malaysia OEL	MALAYSIA		0.1					0.1 mg/m3 TWA (respirable dust)
	National	ESTONIA		0.1					
	National	SLOVAKIA		0.1		0.5			
	National	SLOVENIA		0.1					
	National	BULGARIA		0.07					
	National	ROMANIA		0.1					
	National	LITHUANIA		0.1					
	National	CROATIA		0.1					
2-methoxy-1-methylethyl acetate	DFG	GERMANY	C			270	50		
	National	SWEDEN		275	50				
	National	FRANCE		275	50	550	100		
	National	SPAIN		275	50	550	100		

National	GREECE		275	50	550	100		
National	DENMARK		275	50				
National	FINLAND		270	50	550	100		
National	GERMANY		270	50				
National	PORTUGAL		275	50	550	100		
National	NORWAY		270	50	337.5	75		
National	BELGIUM		275	50	550	100		
NDS	POLAND		260					
NDSCh	POLAND				520			
CHE	SWITZERLAND				275	50		
NDS	NETHERLANDS		550					
National	CZECH REPUBLIC		270					
National	HUNGARY		275		550			
National	ESTONIA		275	50	550	100		
National	LATVIA		275	50	550	100		
National	CZECH REPUBLIC	C			550			
National	SLOVAKIA	C			550			
National	SLOVAKIA		275	50				
National	SLOVENIA		275	50	550	100		
National	UNITED KINGDOM		274	50	548	100		
National	BULGARIA		275.0	50	550.0	100		
National	ROMANIA		275	50	550	100		
TUR	TURKEY		275	50	550	100		
National	LITHUANIA		250	50	400	75		
National	CROATIA		275	50	550	100		
EU			275	50	550	100	Indicative	Possibility of significant uptake through the skin;
EU			275	50	550	100	Indicative	Possibility of significant uptake through the skin

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	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		
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	0.006 mg/l	Fresh Water		
		0.0006 mg/l	Marine water		

		0.0627 mg/kg	Freshwater sediments
		0.00627 mg/kg	Marine water sediments
1,6-Hexanediol Diglycidyl Ether	933999-84-9, 16096-31-4	1 mg/l	Microorganisms in sewage treatments
		0.0115 mg/l	Fresh Water
		0.283 mg/kg	Freshwater sediments
		0.00115 mg/l	Marine water
		0.0283 mg/kg	Marine water sediments
		0.223 mg/kg	Soil
2-methoxy-1-methylethyl acetate	108-65-6	0.635 mg/l	Fresh Water
		0.0635 mg/l	Marine water
		3.29 mg/kg	Freshwater sediments
		0.329 mg/kg	Marine water sediments
		0.29 mg/kg	Soil
		100 mg/l	Microorganisms in sewage treatments
		6.35 mg/l	Intermittent release

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	8.3 mg/kg			Human Dermal	Short Term, systemic effects	
		12.25 mg/m3			Human Inhalation	Short Term, systemic effects	
		8.3 mg/kg			Human Dermal	Long Term, systemic effects	
		12.25 mg/m3			Human Inhalation	Long Term, systemic effects	
				3.571 mg/kg	Human Dermal	Short Term, systemic effects	
				0.75 mg/kg	Human Oral	Short Term, systemic effects	
				3.571 mg/kg	Human Dermal	Long Term, systemic effects	
				0.75 mg/kg	Human Oral	Long Term, systemic effects	
1,6-Hexanediol Diglycidyl Ether	933999-84-9, 16096-31-4	2.8 mg/kg			Human Dermal	Long Term, systemic effects	
		4.9 mg/m3			Human Inhalation	Long Term, systemic effects	

2-methoxy-1-methylethyl acetate	108-65-6	153.5 mg/kg	54.8 mg/kg	Human Dermal	Long Term, systemic effects
		275 mg/m3	33 mg/m3	Human Inhalation	Long Term, systemic effects
			1.67 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 >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

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.

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

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: paste white

Odour: Odourless

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: N.A.

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: N.A.

Solubility in water: Insoluble

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: N.A.

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

9.2. Other information

No additional 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 toxicological effects

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	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	a) acute toxicity	LD50 Oral Rat > 5000.00000 mg/kg
		LD50 Skin Rat > 2000 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 250 mg/kg
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Oral Rat > 15000 mg/kg
		LD50 Skin Rabbit > 23000 mg/kg
		LD50 Oral Rat = 11400 mg/kg
	i) STOT-repeated exposure	NOAEL Oral Rat = 50 mg/kg
		NOAEL Skin Rat = 100 mg/kg
1,6-Hexanediol Diglycidyl Ether	a) acute toxicity	LD50 Oral Rat = 3010.00000 mg/kg
		LD50 Skin Rabbit > 4900 mg/kg
	i) STOT-repeated exposure	NOAEL Oral = 200 mg/kg
		NOAEL Inhalation = 16 mg/m3

free crystalline silica (Ø <10 µ)	a) acute toxicity	LD50 Oral Rat = 500 mg/kg
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rabbit > 5 g/kg
		LD50 Oral Rat = 8532 mg/kg

SECTION 12: Ecological information

12.1. Toxicity

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

Eco-Toxicological Information:

Toxic 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 2(H411)

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 = 5.70000 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia = 2.55 mg/L 48h
		a) Aquatic acute toxicity : EC50 Algae = 1.80000 mg/L 72h
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	CAS: 25068-38-6 - EINECS: 500-033-5 - INDEX: 603-074-00-8	a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1.8 mg/L 48
		a) Aquatic acute toxicity : LC50 Algae > 11 mg/L 72
		a) Aquatic acute toxicity : LC50 Daphnia = 1.3 mg/L 96
		b) Aquatic chronic toxicity : NOEC Daphnia = 0.3 mg/L
1,6-Hexanediol Diglycidyl Ether	CAS: 933999-84-9, 16096-31-4 - EINECS: 618-939-5	a) Aquatic acute toxicity : EC50 Daphnia = 47 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish = 30 mg/L 96
		a) Aquatic acute toxicity : EC50 Algae = 23.1 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 30 mg/L 96h ECHA
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : EC50 Daphnia = 408 mg/L 48h
		a) Aquatic acute toxicity : LC50 Fish = 130.00000 mg/L 96h
		b) Aquatic chronic toxicity : NOEC Fish = 47.50000 mg/L 14d
		b) Aquatic chronic toxicity : NOEC Daphnia >= 100.00000 mg/L 21d
		b) Aquatic chronic toxicity : NOEC Algae >= 1000.00000 mg/L

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

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

14.1. UN number

3082

14.2. UN proper shipping name

ADR-Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resins)

14.3. Transport hazard class(es)

ADR-Class: 9

IATA-Class: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Toxic Component most present: epoxy resins

Marine pollutant: Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR exempt: No

ADR-Label: 9

ADR-Hazard identification number: 90

ADR-Special Provisions: 274 335 375 601

ADR-Transport category (Tunnel restriction code): 3 (-)

Air (IATA) :

IATA-Passenger Aircraft: 964

IATA-Cargo Aircraft: 964

IATA-Label: 9

IATA-Subsidiary hazards: -

IATA-Erg: 9L

IATA-Special Provisioning: A97 A158 A197

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274 335 969

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-A, S-F

IMDG-MFAG: N/A

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

N.A.

These substances, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids, or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to provisions of ADR, IMDG and IATA DGR.

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. 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) 2015/830

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

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

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. 2018/1480 (ATP 13 CLP)

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

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Products belongs to category E2	200	500

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, 29, 40, 75

SVHC Substances:

No data available

National regulations

Produktregisteret Norge: 15957

Produktregister Danmark: 4295476

MAL-kode: 5-5 (A+B: 5-5) (1993)

German Water Hazard Class (WGK)

N.A.

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H315	Causes skin irritation.

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
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
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
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
3.9/1	STOT RE 1	Specific target organ toxicity — repeated exposure, Category 1
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/C2	Calculation method

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
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.

Paragraphs modified from the previous revision:

- 2. HAZARDS IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION