

Safety Data Sheet

MAPEI ACTIVE DP02-S

Safety Data Sheet dated: 18/07/2019 - version 1



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

1.1. Product identifier

Mixture identification:

Trade name: MAPEI ACTIVE DP02-S

Trade code: 9079005

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

Recommended use: Bitumen admixture

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel: +39-02-376731

Fax: +39-02-37673.214

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

Poison Centre - Ospedale di Niguarda - Milan - Tel. +39/02/66101029

MAPEI S.p.A. - Tel. +(39)02376731 - (office hours)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Acute Tox. 4	Harmful if swallowed.
Skin Corr. 1A	Causes severe skin burns and eye damage.
Eye Dam. 1	Causes serious eye damage.
Skin Sens. 1	May cause an allergic skin reaction.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure .
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



Danger

Hazard statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure .
H411	Toxic 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/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER.

P391 Collect spillage.

Contains:

fatty acids, C18 unsatd., dimers, oligomeric
reaction products with teta

ethanediol; ethylene glycol

2,2' -oxybisethanol; diethylene glycol

sodium hydroxide; caustic soda

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

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Mixture identification: MAPEI ACTIVE DP02-S

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥50 - <75 %	fatty acids, C18 unsatd., dimers, oligomeric reaction products with teta	CAS:68082-29-1 EC:500-191-5	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; Aquatic Chronic 2, H411	01-2119972320-44-xxxx
≥20 - <25 %	ethanediol; 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
≥20 - <25 %	2,2' -oxybisethanol; diethylene glycol	CAS:111-46-6 EC:203-872-2 Index:603-140- 00-6	Acute Tox. 4, H302; STOT RE 2, H373	01-2119457857-21-XXXX
≥1 - <2.5 %	sodium hydroxide; caustic soda	CAS:1310-73-2 EC:215-185-5 Index:011-002- 00-6	Skin Corr. 1A, H314	01-2119457892-27-0000

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

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:

Give nothing to eat or drink.

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.

Burning produces heavy smoke.

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/m ³	Long Term ppm	Short Term mg/m ³	Short Term ppm	Behaviour	Note
ethanediol; ethylene glycol	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
National	SWEDEN	25	10	50	20	SWEDEN, Short-term value, 15 minutes average value
EU	NNN	52	20	104	40	Skin
National	NORWAY	10	10	20	20	
ACGIH	NNN	C		100		(H), A4 - URT and eye irr
National	NORWAY	26		52		
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	DENMARK	10	10			
National	FINLAND	50	20	100	40	
National	PORTUGAL	52	20	104	40	
National	NORWAY	52	20	104	40	
NDS	POLAND	15				
NDSCh	POLAND			50		
National	PORTUGAL	C		100		
CHE	SWITZERLAND			52	20	
NDS	NETHERLANDS	52		104		
NDS	NETHERLANDS	10		104		
National	GERMANY	26	10			
National	CZECHIA	50				
National	HUNGARY	52		104		
National	SLOVAKIA	52	20			
National	SLOVENIA	52	20	104	40	
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10	20	104	40	
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	10	20	30	40	
Malaysian OEL	MALAYSIA	C		100	39,4	
National	ESTONIA	52	20	104	40	
National	LATVIA	52	20	104	40	
National	CZECHIA	C		100		
National	SLOVAKIA	C		104		

	National CROATIA		52	20	104	40	Indicative	Possibility of significant uptake through the skin
	EU		52	20	104	40		
2,2' -oxybisethanol; diethylene glycol	National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		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		
	SUVA	NNN	44	10	176	40		
	NDS NNN		10					
	National SWEDEN		45	10	90	20		SWEDEN, Short-term value, 15 minutes average value
	National NORWAY		11	2,5	22	5		
	DFG	GERMANY C			176	40		
	National SWEDEN		45	10				
	National DENMARK		11	2,5				
	National GERMANY		44	10				
	NDS POLAND		10					
	CHE	SWITZERLAND			176	40		
	National ESTONIA		45	10	90	20		
	National LATVIA		10					
sodium hydroxide; caustic soda	National SLOVAKIA C				90			SWEDEN, Ceiling limit value FINLAND, takvärde NORWAY, T URT, eye, and skin irr
	National SLOVAKIA		44	10				
	National SLOVENIA		44	10	176	40		
	National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		101	23	303	69		
	National BULGARIA		10					
	National ROMANIA		500	115	800	184		
	National LITHUANIA		45	10	90	20		
	National CROATIA		101	23				
	NDS NNN		0,5					
	NDSCh NNN		1					
	National SWEDEN C		1		2			
	National FINLAND				2			
	National NORWAY		2					
	ACGIH	NNN C			2			
	National NORWAY		2		2			
	ACGIH	C			2			
	National SWEDEN		1					
	National FRANCE		2					

National SPAIN		2
National GREECE	2	2
National DENMARK	C	2
National FINLAND	C	2
National NORWAY	C	2
NDS POLAND	0,5	
NDSch POLAND		1
CHE SWITZERLAND		2
National CZECHIA	1	
National HUNGARY	2	2
Malaysi a OEL	MALAYSIA C	2
National PORTUGAL	C	2
National ESTONIA	1	2
National LATVIA	0,5	
National CZECHIA	C	2
National SLOVAKIA	2	
National SLOVENIA	2	2
National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		2
National BULGARIA	2,0	
National LITHUANIA	C	2
National CROATIA		2

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
fatty acids, C18 unsatd., dimers,oligomeric reaction products with teta	68082-29-1	0,00434	Fresh Water		
		0,000434	Marine water		
		434,02	Freshwater sediments		
		43,4	Marine water sediments		
ethanediol; ethylene glycol	107-21-1	86,78	Soil		
		10 mg/l	Fresh Water		
		1 mg/l	Marine water		
		1,53	Soil		
		37	Freshwater sediments		
		10 mg/l	Intermittent release		
		199,5	Microorganisms in sewage treatments		

		3,7 mg/kg	Marine water sediments
2,2' -oxybisethanol; diethylene glycol	111-46-6	10 mg/l	Fresh Water
		1 mg/l	Marine water
		20,9 mg/kg	Freshwater sediments
		1,53 mg/kg	Soil
		10 mg/l	Intermittent release
		2,09 mg/kg	Marine water sediments
		199,5 mg/l	Microorganisms in sewage treatments

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
fatty acids, C18 unsatd., dimers, oligomeric reaction products with teta	68082-29-1	0,00039 mg/cm2	0,00039 mg/cm2	0,00097 mg/cm2	Human Inhalation	Long Term (repeated)	
		1,1 mg/kg	0,00011 mg/cm2	0,56 mg/kg	Human Dermal	Long Term (repeated)	
ethanediol; ethylene glycol	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	
2,2' -oxybisethanol; diethylene glycol	111-46-6	53 mg/kg		53 mg/kg	Human Dermal	Long Term, systemic effects	
		60 mg/m3		12 mg/m3	Human Inhalation	Long Term, systemic effects	
		60 mg/m3		12 mg/m3	Human Inhalation	Long Term, local 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 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 374 for gloves and EN 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: liquid light brown

Odour: characteristic

Odour threshold: N.A.

pH: 12.00

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: 170 °C (338 °F)

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: Soluble

Partition coefficient (n-octanol/water): N.A. - This product is a mixture

Auto-ignition temperature: N.A. - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: 450.00 cPs

Explosive properties: == - No components with explosive properties

Oxidizing properties: N.A. - No component with oxidizing properties

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:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

fatty acids, C18 unsatd., a) acute toxicity LD50 Oral Rat > 2000 mg/kg

dimers, oligomeric

reaction products with

teta

LD50 Skin Rat > 2000 mg/kg

ethanediol; ethylene a) acute toxicity

glycol

LD50 Oral Rat > 2000 mg/kg

LC50 Inhalation Rat > mg/l

LD50 Skin Mouse > 2000 mg/kg

LD50 Skin Rat = 10600 mg/kg

		LD50 Oral Rat = 4700 mg/kg
	e) germ cell mutagenicity	NOAEL Oral Rabbit = 2000 mg/kg
	f) carcinogenicity	NOAEL Oral Mouse = 1500 mg/kg
	g) reproductive toxicity	NOAEL Oral Rat = 1000 mg/kg
2,2' -oxybisethanol; diethylene glycol	a) acute toxicity	LC50 Inhalation Rat > 4,6 mg/l 4h
		LD50 Skin Rabbit > 2000 mg/kg
		LD50 Oral Rat > 2000 mg/kg
		LD50 Skin Rabbit = 11890 mg/kg
		LC50 Inhalation Rat > 4600 mg/m3 4h
		LD50 Oral Rat = 12565 mg/kg
	g) reproductive toxicity	NOAEL Oral Mouse = 3060 mg/kg
		NOAEL Oral Rabbit = 1000 mg/kg
sodium hydroxide; caustic soda	a) acute toxicity	LD50 Oral Rat 2000 mg/kg
		LD50 Skin Rabbit 1350 mg/kg
		LD50 Oral Rabbit 500 mg/kg
		LD50 Skin Rabbit = 1350 mg/kg
		LD50 Oral Rat = 325 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation
- e) germ cell mutagenicity
- f) carcinogenicity
- g) reproductive toxicity
- h) STOT-single exposure
- i) STOT-repeated exposure
- j) aspiration hazard

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 components with eco-toxicological properties

Quantity	Component	Ident. Numb.	Ecotox Infos
>=50 - <75 %	fatty acids, C18 unsatd., dimers, oligomeric reaction products with teta	CAS: 68082-29-1 - EINECS: 500-191-5	a) Aquatic acute toxicity : LC50 Algae = 1,25 mg/L 72 a) Aquatic acute toxicity : EC50 Fish = 7,07 mg/L 96 a) Aquatic acute toxicity : EC50 Algae > 4,34000 mg/L 72 a) Aquatic acute toxicity : LC50 Fish > 10,00000 mg/L 96 a) Aquatic acute toxicity : EC10 Algae > 130,00000 mg/L 72
>=20 - <25 %	ethanediol; 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
>=20 - <25 %	2,2' -oxybisethanol; diethylene glycol	CAS: 111-46-6 - EINECS: 203-872-2 - INDEX: 603-140-00-6	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 24 a) Aquatic acute toxicity : EC50 Algae > 100 mg/L - 8 d b) Aquatic chronic toxicity : NOEC Fish > 100 mg/L - 7 d b) Aquatic chronic toxicity : NOEC Daphnia > 100 mg/L - 7 d e) Plant toxicity : EC50 = 11779 mg/kg b) Aquatic chronic toxicity : NOEC Algae = 2700 mg/L - 8 d a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 75200 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 84000 mg/L 48h IUCLID
>=1 - <2.5 %	sodium hydroxide; caustic soda	CAS: 1310-73-2 - EINECS: 215-185-5 - INDEX: 011-002-00-6	a) Aquatic acute toxicity : EC50 Daphnia = 76 mg/L 24 a) Aquatic acute toxicity : EC50 Daphnia = 40,38 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 99 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 45,5 mg/L 96 b) Aquatic chronic toxicity : NOEC Fish = 56 mg/L 96 a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 45,4 mg/L 96h IUCLID

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

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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. (FATTY AMIDOAMINE RESIN - triethylenetetramine)

IATA-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FATTY AMIDOAMINE RESIN - triethylenetetramine)

IMDG-Technical name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FATTY AMIDOAMINE RESIN - triethylenetetramine)

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

Marine pollutant: Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID):

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-Subrisk: -

IATA-Erg: 9L

IATA-Special Provisions: A97 A158 A197

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subrisk: -

IMDG-Special Provisions: 274 335 969

IMDG-EMS: F-A, S-F

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

N.A.

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

Norwegian Product register number: NA

MAL CODE: NA

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. 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)

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

German Water Hazard Class.

N.A.

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: None

SVHC Substances:

No Data Available

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H373	May cause damage to organs through prolonged or repeated exposure .
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.
H411	Toxic to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.2/1A	Skin Corr. 1A	Skin corrosion, Category 1A
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
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

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

3.1/4/Oral	Calculation method
3.2/1A	On basis of test data (pH)
3.3/1	On basis of test data (pH)
3.4.2/1	Calculation method
3.9/2	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

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
VOC: 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
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.