

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

1.1. Product identifier

Mixture identification:

Trade name: MAPEFLEX BLACKFILL

Trade code: 9026762

UFI: 2YN0-E0XD-D00H-2D6Y

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

Recommended use: Bituminous mastics solvent based

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)

Flam. Liq. 3 Flammable liquid and vapour.

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:

H226 Flammable liquid and vapour.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P273 Avoid release to the environment.

P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.

P403+P235 Store in a well-ventilated place. Keep cool.

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

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEFLEX BLACKFILL

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

Concentration (%) w/w)	Name	Ident. Numb.	Classification	Registration Number
≥5 - <10 %	hydrocarbons C9 aromatics	CAS:64742-95-6, 128601-23-0 EC:265-199-0 Index:649-356-00-4	Flam. Liq. 3, H226; STOT SE 3, H335; Asp. Tox. 1, H304; Aquatic Chronic 2, H411, H336, EUH066	01-2119486773-24-XXXX
≥1 - <2.5 %	o-xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT RE 2, H373; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Chronic 3, H412	01-2119488216-32-XXXX
≥0.1 - <0.25 %	toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336	01-2119471310-51-XXXX
≥0.1 - <0.25 %	heptane; n-heptane	CAS:142-82-5 EC:205-563-8 Index:601-008-00-2	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	01-2119475515-33-xxxx

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

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

Treatment:

Not available

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a dry powder fire extinguisher to extinguish.

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 all sources of ignition.

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

Always keep in a well ventilated place.
Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.
Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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
o-xylene CAS: 1330-20-7	National	SWEDEN		221	50	442	100		SWEDEN, Short term value, 15 minutes average value
	National	FINLAND		220	50	440	100		FINLAND, hud
	National	NORWAY		108	25				NORWAY, H
	EU			221	50	442	100		Skin
	National	NORWAY		109	25	218	50		
	ACGIH				100		150		A4, BEI - URT and eye irr, CNS impair
	DFG	GERMANY	C			880	200		
	ACGIH				100		150		A4 - Not Classifiable as a Human Carcinogen; CNS impairment; eye and upper respiratory tract irritation
	National	SWEDEN			221	50			
	National	FRANCE			221	50	442	100	
	National	SPAIN			221	50	442	100	
	National	GREECE			435	100	650	150	
	National	DENMARK			109	25			
National	FINLAND			220	50	440	100		
National	GERMANY			440	100				
National	PORTUGAL			221	50	442	100		

	National	BELGIUM		221	50	442	100		
	NDS	POLAND		100					
	NDSCh	POLAND				200			
	CHE	SWITZERLAND				870	200		
	NDS	NETHERLANDS		210		442			
	National	CZECH REPUBLIC		200					
	National	HUNGARY		221		442			
	Malaysi a OEL	MALAYSIA		434	100				
	National	ESTONIA		200	50	450	100		
	National	LATVIA		221	50	442	100		
	National	CZECH REPUBLIC	C			400			
	National	SLOVAKIA	C			442			
	National	SLOVAKIA		221	50				
	National	SLOVENIA		221	50	442	100		
	National	UNITED KINGDOM		220	50	441	100		
	National	BULGARIA		221,0	50	442	100		
	National	ROMANIA		221	50	442	100		
	TUR	TURKEY		221	50	442	100		
	National	LITHUANIA		221	50	442	100		
	National	CROATIA		221	50	442	100		
	EU			221	50	442	100	Indicative	Possibility of significant uptake through the skin (pure)
toluene CAS: 108-88-3	SUVA			190	50	760	200		
	National	SWEDEN		192	50	384	100		SWEDEN, Short term value, 15 minutes average value
	National	FINLAND		81	25	380	100		FINLAND, hud, buller
	National	NORWAY		94	25				NORWAY, H
	NDS			100					
	NDSCh			200					
	National	NORWAY		94	25	188	50		
	EU			192	50	384	100		Skin
	ACGIH				20				A4, BEI - Visual impair, female repro, pregnancy loss
	DFG	GERMANY	C			760	200		
	ACGIH				20				A4 - Not Classifiable as a Human Carcinogen;female reproductive damage;pregnancy loss;visual impairment
	National	SWEDEN		192	50				
	EU			192	50	384	100	Indicative	Possibility of significant uptake through the skin
	National	FRANCE		76,8	20	384	100		
	National	SPAIN		192	50	384	100		
	National	GREECE		192	50	384	100		
	National	DENMARK		94	25				
	National	FINLAND		81	25	380	100		
	National	GERMANY		190	50				

	National	PORTUGAL	192	50	384	100	
	National	BELGIUM	77	20	384	100	
	NDS	POLAND	100				
	NDSCh	POLAND			200		
	CHE	SWITZERLAND			760	200	
	NDS	NETHERLANDS	150		384		
	National	CZECH REPUBLIC	200				
	National	HUNGARY	190		380		
	Malaysi a OEL	MALAYSIA	188	50			Skin notation
	National	ESTONIA	192	50	384	100	
	National	LATVIA	50	14	150	40	
	National	CZECH REPUBLIC			500		C
	National	SLOVAKIA			384		C
	National	SLOVAKIA	192	50			
	National	SLOVENIA	192	50	384	100	
	National	UNITED KINGDOM	191	50	384	100	
	National	BULGARIA	192,0	50	384,0	100	
	National	ROMANIA	192	50	384	100	
	TUR	TURKEY	192	50	384	100	
	National	LITHUANIA	192	50	384	100	
	National	CROATIA	192	50	384	100	
heptane; n-heptane CAS: 142-82-5	NDS		1200				
	National	SWEDEN	800	200	1200	300	SWEDEN, Short-term value, 15 minutes average value
	National	NORWAY	800	200			
	NDSCh		2000				
	EU		2085	500			
	ACGIH			400		500	CNS impair, URT irr
	DFG	GERMANY			2100	500	
	ACGIH			400		500	CNS impairment (listed under Heptane, all isomers);upper respiratory tract irritation (listed under Heptane, all isomers)
	National	SWEDEN	800	200			
	National	FRANCE	1668	400	2085	500	
	National	SPAIN	2085	500			
	National	GREECE	2000	500	2000	500	
	National	DENMARK	820	200			
	National	FINLAND	1200	300	2100	500	
	National	GERMANY	2100	500			
	National	PORTUGAL	2085	500		500	
	National	BELGIUM	1664	400	2085	500	
	NDS	POLAND	1200				
	NDSCh	POLAND			2000		
	CHE	SWITZERLAND			1600	400	
	NDS	NETHERLANDS	1200		1600		
	National	CZECH REPUBLIC	1000				
	National	HUNGARY	2000				

Malaysi a OEL	MALAYSIA	1640	400		
National	ESTONIA	2085	500		
National	LATVIA	350	85	2085	500
National	CZECH REPUBLIC			2000	
National	SLOVAKIA	2085	500		
National	SLOVENIA	2085	500		
National	UNITED KINGDOM	2085	500	6255	1500
National	BULGARIA	1600			
National	ROMANIA	2085	500		
TUR	TURKEY	2085	500		
National	LITHUANIA	2085	500	3128	750
National	CROATIA	2085	500		
EU		2085	500		Indicative

Biological Exposure Index

	Value	UoM	Medium	Biological Indicator	Sampling Period
o-xylene CAS: 1330-20-7	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
toluene CAS: 108-88-3	0,02	mg/L	Blood	Toluene	Before last turn of the working week
	0,03	mg/L	Urine	Toluene	End of turn
	0,3	MGGCREAT	Urine	O-Cresol	End of turn

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
o-xylene CAS: 1330-20-7	0,327 mg/l	Fresh Water		
	0,327 mg/l	Marine water		
	12,46 mg/kg	Freshwater sediments		
	12,46 mg/kg	Marine water sediments		
	2,31 mg/kg	Soil		
	6,58 mg/l	Microorganisms in sewage treatments		
toluene CAS: 108-88-3	0,32 mg/l	Intermittent release		
		Freshwater sediments		PNEC
		Soil		PNEC
		Marine water sediments		PNEC
		Fresh Water		PNEC
		Marine water		PNEC
		Intermittent release		PNEC
		Microorganisms in sewage treatments		

Derived No Effect Level. (DNEL)

	Worker Industrial	Worker Consumer	Exposure Route	Exposure Frequency	Remark
o-xylene CAS: 1330-20-7	289 mg/m3	174 mg/m3	Human Inhalation	Short Term, local effects	

	289 mg/m ³	174 mg/m ³	Human Inhalation	Short Term, systemic effects
	180 mg/kg	108 mg/kg	Human Dermal	Long Term, systemic effects
	77 mg/m ³	14,8 mg/m ³	Human Inhalation	Long Term, systemic effects
		1,6 mg/kg	Human Oral	Long Term, systemic effects
toluene CAS: 108-88-3	384 mg/m ³	226 mg/kg	Human Dermal	Long Term, systemic effects
	192 mg/m ³		Human Inhalation	Long Term, systemic effects
			Human Oral	Long Term, systemic effects
		226 mg/kg	Human Dermal	Long Term, systemic effects
	384 mg/m ³		Human Inhalation	Short Term, systemic effects

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

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.

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: Black

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: The product is classified Flam. Liq. 3 H226

Upper/lower flammability or explosive limits: Not available

Flash point: 30 °C (86 °F)

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: Not available

Viscosity: Not available

Kinematic viscosity: Not available

Solubility in water: Insoluble

Solubility in oil: partly soluble
Partition coefficient (n-octanol/water): Not available
Vapour pressure: Not available
Relative density: Not available
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

Avoid contact with combustible materials. The product could catch fire.

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

hydrocarbons C9 aromatics	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg
		LD50 Oral Rat = 3492, mg/kg
		LC50 Inhalation Vapour Rat = 6193, mg/m3
o-xylene	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
		LC50 Inhalation Vapour Rat = 11 mg/l 4h

		LD50 Skin Rabbit = 3200 mg/kg
		LD50 Skin Rabbit > 4350 mg/kg
		LC50 Inhalation Rat = 29,08 mg/l 4h
		LD50 Oral Rat = 3500 mg/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat > 2000 ppm
	f) carcinogenicity	NOAEL Oral Rat = 500 mg/kg
		NOAEL Oral Rat = 1000 mg/kg
	g) reproductive toxicity	NOAEL Inhalation Rat = 500 ppm
toluene	a) acute toxicity	LD50 Oral Rat = 5580, mg/kg
		LD50 Skin Rabbit = 12124, mg/kg
		LC50 Inhalation Rat = 12,5 mg/l 4h
	g) reproductive toxicity	NOAEC Rat = 1200, ppm
		NOAEL Rat = 2000, ppm
heptane; n-heptane	a) acute toxicity	LD50 Skin Rabbit = 3000 mg/kg
		LC50 Inhalation Rat = 103 g/m3 4h
		LD50 Oral Mouse = 5000 mg/kg

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
hydrocarbons C9 aromatics	CAS: 64742-95-6, 128601-23-0 - EINECS: 265-199-0 - INDEX: 649-356-00-4	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 9,22 mg/L 96h IUCLID a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 21,3 mg/L 48h IUCLID
o-xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : EC50 Daphnia = 165 mg/L 48 a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 2,2 mg/L 72 c) Bacteria toxicity : EC50 = 96 mg/L 24 b) Aquatic chronic toxicity : NOEC Fish > 1,3 mg/L b) Aquatic chronic toxicity : NOEC Daphnia = 1,57 mg/L a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13,4 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2,661 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13,5 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13,1 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA

		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7,711 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,53 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30,26 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 3,82 mg/L 48h
		a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0,6 mg/L 48h
toluene	CAS: 108-88-3 - EINECS: 203-625-9 - INDEX: 601-021-00-3	a) Aquatic acute toxicity : EC50 Algae = 134 mg/L 3
		a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 433 mg/L 96h IUCLID
heptane; n-heptane	CAS: 142-82-5 - EINECS: 205-563-8 - INDEX: 601-008-00-2	a) Aquatic acute toxicity : LC50 Fish = 5,5 mg/L 96h
		a) Aquatic acute toxicity : LC50 Fish = 375 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = mg/L 48
		a) Aquatic acute toxicity : LC50 Algae = mg/L 72
		a) Aquatic acute toxicity : LC50 Fish Cichlid fish = 375 mg/L 96h

12.2. Persistence and degradability

Component	Persistence/Degradability:
toluene	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

14.1. UN number or ID number

1133

14.2. UN proper shipping name

ADR-Shipping Name: ADHESIVES (sodium p-chloro-m-cresolate)

IATA-Technical name: ADHESIVES containing flammable liquid (sodium p-chloro-m-cresolate)

IMDG-Technical name: ADHESIVES containing flammable liquid (sodium p-chloro-m-cresolate)

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

IMDG-EMS: F-E, S-D

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR-Hazard identification number: -

ADR-Special Provisions: -

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

Air (IATA) :

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 223 955

IMDG-EMS: F-E, S-D

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

Transport in accordance with 2.2.3.1.5 of ADR and 2.3.2.5 of the IMDG Code.

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) 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):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Products belongs to category P5c	5000	50000

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, 40

Restrictions related to the substances contained: 48, 75

SVHC Substances:

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

German Water Hazard Class (WGK)

2

15.2. Chemical safety assessment

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

SECTION 16: Other information

Code	Description
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.7/2	Repr. 2	Reproductive toxicity, Category 2

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/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4.1/C1	Aquatic Chronic 1	Chronic (long term) aquatic hazard, 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

2.6/3	On basis of test data
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.**