

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

1.1. Product identifier

Mixture identification:

Trade name: MORCEM ELASTIC PM BARNIZ U.V. COMP/A

Registration Number N/A

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

Recommended use: Solvent-borne protective paint

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company:GRUPO PUMA SL

AVDA. AGRUPACIÓN CÓRDOBA, NUM. 17

14014 CÓRDOBA - CÓRDOBA - ESPAÑA

Phone.: +34 901 11 69 12 - Fax: +34 957 44 19 92

fds@grupopuma.com

<http://www.grupopuma.com>

1.4. Emergency telephone number

901 11 69 12 (Schedule of attention: 08:30 – 13:30 / 16:00 – 19:00)

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.
Skin Sens. 1 May cause an allergic skin reaction.
STOT SE 3 May cause respiratory irritation.
STOT SE 3 May cause drowsiness or dizziness.
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:

H226 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic 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.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378 In case of fire, use a dry powder fire extinguisher to extinguish.
P391 Collect spillage.



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

Special Provisions:

EUH208 Contains fatty acids, C14-18 and C16-18-unsatd., maleated. May produce an allergic reaction.

Contains:

2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE, ETHENYLBENZENE AND 1,2 PROPANEDIOLMONO(2-METHYL 2 PROPANOATE) AND 2-PROPENOIC ACID

hydrocarbons, C9, aromatics

o-xylene

Special provisions according to Annex XVII of REACH and subsequent amendments:

Restricted to professional users.

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: MORCEM ELASTIC PM BARNIZ U.V. COMP. A

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER, POLYMER WITH BUTYL 2-PROPENOATE, ETHENYLBENZENE AND 1,2 PROPANEDIOLMONO(2-METHYL 2 PROPANOATE) AND 2-PROPENOIC ACID	CAS:37237-99-3	Skin Sens. 1, H317	
≥25 - <50 %	hydrocarbons, C9, aromatics	CAS:64742-95-6 EC:918-668-5	Flam. Liq. 3, H226; STOT SE 3, H335; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411, EUH066	01-2119455851-35
≥2.5 - <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; Aquatic Chronic 3, H412; STOT SE 3, H335	01-2119488216-32-XXXX
≥0.49 - <1 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29-xxxx
≥0.25 - <0.49 %	Solvent naphtha (petroleum), light arom. (*)	CAS:64742-95-6 EC:265-199-0 Index:649-356-00-4	Flam. Liq. 3, H226; STOT SE 3, H335; Asp. Tox. 1, H304; STOT SE 3, H336; Aquatic Chronic 2, H411, EUH066, DECLP(*)	
≥0.1 - <0.25 %	fatty acids, C14-18 and C16-18-unsatd., maleated	CAS:85711-46-2 EC:288-306-2	Skin Irrit. 2, H315; Skin Sens. 1, H317	01-2119976378-19-xxxx
≥0.1 - <0.25 %	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	01-2119488216-32-XXXX
≥0.05 - <0.1 %	ethylbenzene	CAS:100-41-4 EC:202-849-4	Flam. Liq. 2, H225; Acute Tox. 4, H332; Asp. Tox. 1, H304; STOT RE 2, H373	

(*)DECLP Substance classified in accordance with Note P, Annex VI of EC Regulation (EC) 1272/2008.



The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply. This note applies only to certain complex oil-derived substances in Part 3.

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact:

Wash immediately with water.

In case of Ingestion:

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

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

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

N.A.

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:

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

Use localized ventilation system.

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.

Safety Data Sheet
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



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

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour Note
o-xylene	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	NNN		221	50	442	100	Skin
	National	NORWAY		109	25	218	50	
	ACGIH	NNN			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	NORWAY		108	25	135	37,5		
National	BELGIUM		221	50	442	100		
NDS	POLAND		100					
NDSch	POLAND					200		

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



CHE	SWITZERLAND		870	200			
NDS	NETHERLANDS	210	442				
National	CZECHIA	200					
National	HUNGARY	221	442				
Malaysia OEL	MALAYSIA	434	100				
National	ESTONIA	200	50	450	100		
National	LATVIA	221	50	442	100		
National	CZECHIA C			400			
National	SLOVAKIA C			442			
National	SLOVAKIA	221	50				
National	SLOVENIA	221	50	442	100		
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	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)	
2-methoxy-1-methylethyl acetate	ACGIH	NNN	275,000	50,000	550,000	100,000	Skin
	SUVA	NNN	275,000	50			
	National	SWEDEN	250,000	50	400,000	75,000	SWEDEN, Short-term value, 15 minutes average value
	National	NORWAY	270,000	50			H E
	National	FINLAND	270,000	50,000	550,000	100,000	FINLAND, hud
	NDS	NNN	260,000				
	NDSch	NNN	520,000				
	EU	NNN	275,000	50,000	550,000	100,000	Skin
	DFG	GERMANY C			270,000	50,000	
	National	SWEDEN	275,000	50,000			
	National	FRANCE	275,000	50	550,000	100,000	
	National	SPAIN	275	50	550,000	100,000	
	National	GREECE	275	50	550	100	
	National	DENMARK	275	50			
	National	FINLAND	270,000	50	550,000	100,000	
	National	GERMANY	270,000	50			
	National	PORTUGAL	275,000	50	550,000	100,000	
	National	BELGIUM	275	50	550	100	
	NDS	POLAND	260,000				
	NDSch	POLAND			520,000		

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



CHE	SWITZERLAND		275,000	50,000			
NDS	NETHERLANDS		550,000				
National	CZECHIA		270,000				
National	HUNGARY		275,000	550,000			
National	ESTONIA		275,000	50,000	550,000	100,000	
National	LATVIA		275,000	50,000	550,000	100,000	
National	CZECHIA	C			550		
National	SLOVAKIA	C			550		
National	SLOVAKIA		275,000	50,000			
National	SLOVENIA		275,000	50,000	550,000	100,000	
National	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND		274,000	50,000	548,000	100,000	
National	BULGARIA		275,000	50,000	550,000	100,000	
National	ROMANIA		275,000	50,000	550,000	100,000	
TUR	TURKEY		275,000	50,000	550,000	100,000	
National	LITHUANIA		250,000	50	400,000	75,000	
National	CROATIA		275,000	50	550,000	100,000	
EU	NNN		275,000	50	550,000	100,000	Indicative Possibility of significant uptake through the skin
Solvent naphtha (petroleum), light arom. (*)	EU	NNN	100	19			
o-xylene	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	NNN	221	50	442	100	Skin
	National	NORWAY	109	25	218	50	
	ACGIH	NNN		100		150	A4, BEI - URT and eye irr, CNS impair
	DFG	GERMANY			880	200	
	ACGIH			100		150	A4 - Not Classifiable as a Human Carcinogen; CNS impairment; eye and upper respiratory tract irritation
	National	SWEDEN					
	National	FRANCE					
	National	SPAIN	221	50			
			221	50	442	100	
			221	50	442	100	

Safety Data Sheet
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



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 NORWAY	108	25	135	37,5
National BELGIUM	221	50	442	100
NDS POLAND	100			
NDSch POLAND			200	
CHE SWITZERLAND			870	200
NDS NETHERLANDS	210		442	
National CZECHIA	200			
National HUNGARY	221		442	
Malaysi MALAYSIA a OEL	434	100		
National ESTONIA	200	50	450	100
National LATVIA	221	50	442	100
National CZECHIA C			400	
National SLOVAKIA C			442	
National SLOVAKIA	221	50		
National SLOVENIA	221	50	442	100
National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	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

ethylbenzene

National SWEDEN	200	50	450	100
National FINLAND	220	50	880	200
National NORWAY	20	5		
EU NNN	442	100	884	200
National NORWAY	217	50	434	100
ACGIH NNN		20		
National POLAND	200		400	
DFG GERMANY C			176	40
ACGIH		20		

Indicative Possibility of significant uptake through the skin (pure)

SWEDEN, Short-term value, 15 minutes average value

FINLAND, hud

NORWAY, HK Skin

A3, BEI - URT irr, kidney dam (nephropathy), cochlear impair

A3 -

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



A3 -
 Confirmed
 Animal
 Carcinogen
 with
 Unknown
 Relevance to
 Humans;
 upper
 respiratory
 tract
 irritation;
 kidney
 damage
 (nephropathy
); cochlear
 impairment

National SWEDEN	220	50		
National FRANCE	88,4	20	442	100
National SPAIN	441	100	884	200
National GREECE	435	100	545	125
National DENMARK	217	50		
National FINLAND	220	50	880	200
National GERMANY	88	20		
National PORTUGAL	442	100	884	200
National NORWAY	20	5	30	10
National BELGIUM	442	100	551	125
NDS POLAND	200			
NDSch POLAND			400	
CHE SWITZERLAN D			220	50
NDS NETHERLAND S	215		430	
National CZECHIA	200			
National HUNGARY	442		884	
Malaysi MALAYSIA a OEL	434	100		
National ESTONIA	442	100	884	200
National LATVIA	442	100	884	200
National CZECHIA C			500	
National SLOVAKIA C			884	
National SLOVAKIA	442	100		
National SLOVENIA	442	100	884	200
National UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND	441	100	552	125
National BULGARIA	435		545	
National ROMANIA	442	100	884	200
TUR TURKEY	442	100	884	200
National LITHUANIA	442	100	884	200
National CROATIA	442	100	884	200
EU	442	100	884	200

Indicative Possibility of
 significant
 uptake
 through the
 skin

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
---------	-----------	-------	-----	--------	----------------------	-----------------



1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
100-41-4	ethylbenzene	0,15	GGCREAT	Urine	Mandelic acid and fenilgliossalico	End of turn

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
o-xylene	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		
		0,32 mg/l	Intermittent release		
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		
		6,35 mg/l	Intermittent release		
		100 mg/l	Microorganisms in sewage treatments		
		0,29 mg/kg	Soil		
o-xylene	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		
		0,32 mg/l	Intermittent release		
ethylbenzene	100-41-4	0,1 mg/l	Fresh Water		

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP.A
 Safety Data Sheet dated: 15/01/2020 - version 3



0,01 mg/l	Marine water
13,7 mg/kg	Freshwater sediments
1,37 mg/kg	Marine water sediments
2,68 mg/kg	Soil
9,6 mg/l	Microorganisms in sewage treatments

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industr y	Worker Profess ional	Consu mer	Exposure Route	Exposure Frequency	Remark
o-xylene	1330-20-7	442, 000000 mg/m3		174 mg/m3	Human Inhalation		Short Term, local effects
		289 mg/m3		174 mg/m3	Human Inhalation		Short Term, systemic effects
		212, 000000 mg/kg		125, 000000 mg/kg	Human Dermal		Long Term, systemic effects
		221, 000000 mg/m3		65, 300000 mg/m3	Human Inhalation		Long Term, systemic effects
				12, 500000 mg/kg	Human Oral		Long Term, systemic effects
2-methoxy-1- methylethyl acetate	108-65-6	796 mg/kg		320 mg/kg	Human Dermal		Long Term, systemic effects
		275 mg/m3		33 mg/m3	Human Inhalation		Long Term, systemic effects
				36 mg/kg	Human Oral		Long Term, systemic effects
		550 mg/m3			Human Inhalation		Short Term, local effects
Solvent naphtha (petroleum), light arom. (*)	64742-95-6	25 mg/kg			Human Dermal		Long Term, systemic effects
		150 mg/m3			Human Inhalation		Long Term, systemic effects
				11 mg/kg	Human Dermal		Long Term, systemic effects
				32 mg/m3	Human Inhalation		Long Term, systemic effects
				11 mg/kg	Human Oral		Long Term, systemic effects
o-xylene	1330-20-7	289 mg/m3		174 mg/m3	Human Inhalation		Short Term, local effects
		289 mg/m3		174 mg/m3	Human Inhalation		Short Term, systemic effects
		180 mg/kg		108 mg/kg	Human Dermal		Long Term, systemic effects
		77 mg/m3		14,8 mg/m3	Human Inhalation		Long Term, systemic effects



			1,6 mg/kg	Human Oral Long Term, systemic effects
ethylbenzene	100-41-4	180 mg/kg		Human Dermal
		77 mg/m3	15 mg/m3	Human Inhalation
			1,6 mg/kg	Human Oral

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 $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

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

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

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

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

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN 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.

Use adequate protective respiratory equipment.

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: Viscous various

Odour: characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: N.A.

Flash point: 45 °C (113 °F)

Evaporation rate: N.A.

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

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.25 g/cm³

Solubility in water: Insoluble

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: 1,350.00 cPs

Explosive properties: N.A. - 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

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

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:

hydrocarbons, C9, aromatics	a) acute toxicity	LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat = 3400 ppm 4h LD50 Oral Rat = 8400 mg/kg
o-xylene	a) acute toxicity	LD50 Oral Mouse = 5627,00000 mg/kg LC50 Inhalation Vapour Rat = 11 mg/l 4h LD50 Skin Rabbit > 5000,00000 mg/kg LC50 Inhalation Rat = 29,08000 mg/l 4h LC50 Inhalation Rat = 6700,00000 ppm 4h LD50 Skin Rabbit > 4350 mg/kg LD50 Oral Rat = 3500 mg/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat > 2000,00000 ppm
	f) carcinogenicity	NOAEL Oral Rat = 500 mg/kg
	g) reproductive toxicity	NOAEL Inhalation Rat = 500,00000 ppm
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg LD50 Skin Rabbit > 5000 mg/kg LC50 Inhalation Dust Rat > 23,8 mg/l LD50 Skin Rabbit > 5 g/kg LD50 Oral Rat = 8532 mg/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 1000 ppm
	g) reproductive toxicity	NOAEL Inhalation Rat = 500 ppm
Solvent naphtha (petroleum), light arom. (*)	a) acute toxicity	LD50 Oral Rat > mg/kg LD50 Skin Rabbit > 2000 mg/kg LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat = 3400 ppm 4h LD50 Oral Rat = 8400 mg/kg
fatty acids, C14-18 and C16-18-unsatd., maleated	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
	g) reproductive toxicity	NOAEL Oral Rat > 1000 mg/kg
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
ethylbenzene	a) acute toxicity	LD50 Oral Rat = 3500 mg/kg
		LD50 Skin Rabbit = 15400 mg/kg
		LC50 Inhalation Rat = 17,2 mg/l 4h
		LD50 Skin Rabbit = 15400 mg/kg
		LC50 Inhalation Rat = 17,4 mg/l 4h
		LD50 Oral Rat = 3500 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
- k) Toxicological kinetics, metabolism and distribution information
- 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

Component	Ident. Numb.	Ecotox Infos
hydrocarbons, C9, aromatics	CAS: 64742-95-6 - EINECS: 918-668-5	a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 9,22 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 6,14 mg/L 48h IUCLID
		G : LC50 Avian Colinus virginianus > 6500 ppm 5d IUCLID
		G : LD50 Avian Colinus virginianus > 2250 mg/kg 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 = 2,60000 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 - 56 days



		b) Aquatic chronic toxicity : NOEC Daphnia = 1,57 mg/L - 21 days
		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 Lepomis macrochirus 13,10000 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30,26000 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 3,82000 mg/L 48h
		a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0,60000 mg/L 48h
		b) Aquatic chronic toxicity : EC50 Algae = 0,44000 mg/L 72h
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13,5 mg/L 96h IUCLID
		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
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : LC50 Fish = 140 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 500 mg/L 48
		b) Aquatic chronic toxicity : NOEC Fish = 47,5 mg/L - 14 d
		b) Aquatic chronic toxicity : NOEC Daphnia = 100 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
		a) Aquatic acute toxicity : NOEC Algae = 1000 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 161 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 500 mg/L 48h IUCLID
Solvent naphtha (petroleum), light arom. (*)	CAS: 64742-95-6 - EINECS: 265-199-0 - INDEX: 649-356-00-4	a) Aquatic acute toxicity : LC50 Fish = 9,22 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia = 6,14 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 9,22 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 6,14 mg/L 48h IUCLID
		G : LC50 Avian Colinus virginianus > 6500 ppm 5d IUCLID
		G : LD50 Avian Colinus virginianus > 2250 mg/kg IUCLID
fatty acids, C14-18 and C16-18-unsatd., maleated	CAS: 85711-46-2 - EINECS: 288-306-2	a) Aquatic acute toxicity : LC50 Fish > 150 mg/L 48
		a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae > 100 mg/L 72
		c) Bacteria toxicity : EC50 Bacteria > 1000 mg/L 3
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
- a) Aquatic acute toxicity : EC50 Algae = 7,7 mg/L 96

ethylbenzene

CAS: 100-41-4 -
 EINECS: 202-849-4

- a) Aquatic acute toxicity : LC50 Fish = 5,1 mg/L 96
- a) Aquatic acute toxicity : LC50 Daphnia = mg/L 48
- a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 11 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 4,2 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 7,55 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 32 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 9,1 mg/L 96h EPA
- a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata = 9,6 mg/L 96h EPA a)
- a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 1,8 mg/L 48h IUCLID
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata = 4,6 mg/L 72h IUCLID
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata > 438 mg/L 96h IUCLID
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 2,6 mg/L 72h EPA
- a) Aquatic acute toxicity : EC50 Algae Pseudokirchneriella subcapitata 1,7 mg/L 96h EPA

12.2. Persistence and degradability

Component	Persitence/Degradabili ty:
o-xylene	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 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.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Product:

Do not dispose of waste into sewers.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to an authorized waste disposal service.

Contaminated packaging:

Empty remaining content.

Dispose of as unused product.

Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

1139

14.2. UN proper shipping name

ADR-Shipping Name: COATING SOLUTION (Hydrocarbons, C9, aromatics)

IATA-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining) (Hydrocarbons, C9, aromatics)

IMDG-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under-coating, drum or barrel lining) (Hydrocarbons, C9, aromatics)

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

Toxic Component most present: Hydrocarbons, C9, aromatics

Marine pollutant: Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR exempt: No

ADR-Label: 3

ADR-Hazard identification number: 30

ADR-Special Provisions: -

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

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 955



IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: F-E, S-E
IMDG-MFAG: N/A

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) : 340 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. 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 P5c	5000	50000
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, 40

Restrictions related to the substances contained: 28, 29, 52

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
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.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause 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
2.6/2	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
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
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
--	---------------------------------

2.6/3	On basis of test data
3.4.2/1	Calculation method
3.8/3	Calculation method
3.8/3	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
- 5. FIRE-FIGHTING MEASURES
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

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

1.1. Product identifier

Mixture identification:

Trade name: MORCEM ELASTIC PM BARNIZ U.V. COMP. B

Registration Number N/A

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

Recommended use: Crosslinking agent

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: GRUPO PUMA SL

AVDA. AGRUPACIÓN CÓRDOBA, NUM. 17

14014 CÓRDOBA - CÓRDOBA - ESPAÑA

Phone.: +34 901 11 69 12 - Fax: +34 957 44 19 92

fds@grupopuma.com

<http://www.grupopuma.com>

1.4. Emergency telephone number

901 11 69 12 (Schedule of attention: 08:30 – 13:30 / 16:00 – 19:00)

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.
Acute Tox. 4	Harmful if inhaled.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1	May cause an allergic skin reaction.
STOT SE 3	May cause respiratory irritation.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure .

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.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .

Precautionary statements:

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



- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 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].
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P403+P235 Store in a well-ventilated place. Keep cool.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

Contains:

- HDI oligomers, iminooxadiazindione
- o-xylene
- hexamethylene-di-isocyanate

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: MORCEM ELASTIC PM BARNIZ U.V. COMP. B

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥75 - <100 %	HDI oligomers, iminooxadiazindione	CAS:28182-81-2 EC:931-297-3	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	01-2119488934-20-XXXX
≥10 - <20 %	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	01-2119488216-32-XXXX
≥10 - <20 %	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
≥0.25 - <0.49 %	hexamethylene-di-isocyanate	CAS:822-06-0 EC:212-485-8 Index:615-011-00-1	Acute Tox. 2, H330; Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317	01-2119457571-37-xxxx

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

- Immediately take off all contaminated clothing.
- 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:

- If breathing is irregular or stopped, administer artificial respiration.
- In case of inhalation, consult a doctor immediately and show him packing or label.

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:

CO2 or Dry chemical fire extinguisher.

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.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

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.

Use localized ventilation system.

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

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
o-xylene	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	NNN		221	50	442	100		Skin
	National	NORWAY		109	25	218	50		
	ACGIH	NNN			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	NORWAY			108	25	135	37,5	
	National	BELGIUM			221	50	442	100	
	NDS	POLAND			100				
	NDSch	POLAND					200		
	CHE	SWITZERLAND					870	200	
	NDS	NETHERLANDS			210		442		
	National	CZECHIA			200				
National	HUNGARY			221		442			
Malaysian OEL	MALAYSIA			434	100				
National	ESTONIA			200	50	450	100		
National	LATVIA			221	50	442	100		
National	CZECHIA	C				400			
National	SLOVAKIA	C				442			
National	SLOVAKIA			221	50				
National	SLOVENIA			221	50	442	100		
National	UNITED			220	50	441	100		

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP. B
 Safety Data Sheet dated: 15/01/2020 - version 3



KINGDOM OF
 GREAT
 BRITAIN AND
 NORTHERN
 IRELAND

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)

2-methoxy-1-methylethyl acetate ACGIH NNN 275 50 550 100

Skin

SUVA NNN	275	50		
National SWEDEN	250	50	400	75

SWEDEN, Short-term value, 15 minutes average value

National FINLAND 270 50 550 100

FINLAND, hud

National NORWAY 270 50

NORWAY, H

NDS NNN 260

NDSCh NNN 520

EU NNN 275 50 550 100

Skin

National NORWAY 275 50 550 100

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 CZECHIA 270

National HUNGARY 275 550

National ESTONIA 275 50 550 100

National LATVIA 275 50 550 100

National CZECHIA C 550

National SLOVAKIA C 550

National SLOVAKIA 275 50

National SLOVENIA 275 50 550 100

National UNITED 274 50 548 100

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP. B
 Safety Data Sheet dated: 15/01/2020 - version 3



KINGDOM OF
 GREAT
 BRITAIN AND
 NORTHERN
 IRELAND

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

hexamethylene-di-isocyanate

ACGIH NNN		0,005		
National SWEDEN C	0,02	0,002	0,03	0,005
National NORWAY	0,035	0,005		
National NORWAY	0,035	0,005	0,07	0,01
DFG GERMANY C			0,035	0,005
ACGIH		0,005		

URT irr, resp sens

SWEDEN, Ceiling limit value

NORWAY, A 4

respiratory sensitization; upper respiratory tract irritation

National SWEDEN	0,02	0,002		
National FRANCE	0,075	0,01	0,15	0,02
National SPAIN	0,035	0,005		
National GREECE	0,075	0,01	0,15	0,02
National DENMARK	0,035	0,005		
National GERMANY	0,035	0,005		
National PORTUGAL		0,005		
National NORWAY	0,035	0,005		0,01
National BELGIUM	0,034	0,005		
NDS POLAND	0,04			
NDSch POLAND			0,08	
National CZECHIA	0,035			
National HUNGARY	0,035		0,035	
Malaysi a OEL MALAYSIA	0,034	0,005		
National ESTONIA	0,03	0,005	0,07	0,01
National LATVIA	0,05			
National CZECHIA C			0,07	
National SLOVAKIA	0,035	0,005		
National SLOVENIA	0,035	0,005	0,035	0,005
National BULGARIA	0,1			
National ROMANIA	0,05	0,007	1	0,14
National LITHUANIA	0,03	0,005		
National LITHUANIA C			0,07	0,01

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn

Safety Data Shee
MORCEM ELASTIC PM BARNIZ U.V. COMP. B
Safety Data Sheet dated: 15/01/2020 - version 3



822-06-0 hexamethylene- 15 MICROGGCREAT Urine 1,6- Hexamethylenediamine End of turn
di-isocyanate with hydrolysis

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC LIMIT	Exposure Route	Exposure Frequency	Remark
HDI oligomers, iminooxadiazindione	28182-81-2	0,199	Fresh Water		
		44551	Freshwater sediments		
		0,0199	Marine water		
		4455	Marine water sediments		
		100	Microorganisms in sewage treatments		
		8884	Soil		
o-xylene	1330-20-7	0,327	Fresh Water		
		0,327	Marine water		
		12,46	Freshwater sediments		
		12,46	Marine water sediments		
		2,31	Soil		
		6,58	Microorganisms in sewage treatments		
		0,32	Intermittent release		
2-methoxy-1-methylethyl acetate	108-65-6	0,635	Fresh Water		
		0,0635	Marine water		
		3,29	Freshwater sediments		
		0,329	Marine water sediments		
		6,35	Intermittent release		
		100	Microorganisms in sewage treatments		
hexamethylene-di-isocyanate	822-06-0	0,077	Fresh Water		
		0,008	Marine water		
		8,42	Microorganisms in sewage treatments		

Safety Data Sheet
MORCEM ELASTIC PM BARNIZ U.V. COMP. B
 Safety Data Sheet dated: 15/01/2020 - version 3



0,013 Freshwater
 mg/kg sediments
 0,001 Marine water
 mg/kg
 0,003 Soil

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
HDI oligomers, iminooxadiazindione	28182-81-2	0,5 mg/m3			Human Inhalation	Long Term, local effects	
		1 mg/m3			Human Inhalation	Short Term, local effects	
o-xylene	1330-20-7	289 mg/m3		174 mg/m3	Human Inhalation	Short Term, local effects	
		289 mg/m3		174 mg/m3	Human Inhalation	Short Term, systemic effects	
		180 mg/kg		108 mg/kg	Human Dermal	Long Term, systemic effects	
		77 mg/m3		14,8 mg/m3	Human Inhalation	Long Term, systemic effects	
2-methoxy-1-methylethyl acetate	108-65-6			320 mg/kg	Human Dermal	Long Term, systemic effects	
				33 mg/m3	Human Inhalation	Long Term, systemic effects	
				36 mg/kg	Human Oral	Long Term, systemic effects	
hexamethylene-diisocyanate	822-06-0	550 mg/m3			Human Inhalation	Short Term, local effects	
		0,035 mg/m3			Human Inhalation	Long Term, systemic effects	
		0,07 mg/m3			Human Inhalation	Short Term, systemic effects	
		0,035 mg/m3			Human Inhalation	Long Term, local effects	
		0,07 mg/m3			Human Inhalation	Short 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 $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

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

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

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

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

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN 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.

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

Use adequate protective respiratory equipment.



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: clear

Odour: solvent like

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 145 °C (293 °F)

Flash point: 38 °C (100 °F)

Evaporation rate: N.A.

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

Vapour density: N.A.

Vapour pressure: 10.00

Relative density: 1.07 g/cm³

Solubility in water: Immiscible

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: 320.00 cPs

Explosive properties: N.A. - 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

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

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:

HDI oligomers,
iminoxadiazindione

a) acute toxicity

LD50 Oral Rat > 5000 mg/kg

LD50 Skin Rat > 2000 mg/kg

LD50 Skin Rabbit > 2000 mg/kg

LC50 Inhalation Mist Rat = 1,5 mg/l 4h

LC50 Skin Rat = mg/l

LC50 Inhalation Rat = 18500 mg/m³ 1h



b) skin corrosion/irritation Respiratory Tract Irritant Inhalation Mist Rabbit 90 d
 Positive mg/kg
 Respiratory Tract Irritant Rabbit Positive

d) respiratory or skin sensitisation Skin Sensitization Skin Mouse Positive 4h
 Skin Sensitization Inhalation Mouse Positive 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

2-methoxy-1-methylethyl acetate

a) acute toxicity LD50 Oral Rat > 5000 mg/kg
 LD50 Skin Rabbit > 5000 mg/kg
 LC50 Inhalation Dust Rat > 23,8 mg/l
 LD50 Skin Rabbit > 5 g/kg
 LD50 Oral Rat = 8532 mg/kg

e) germ cell mutagenicity NOAEL Inhalation Rat = 1000 ppm

g) reproductive toxicity NOAEL Inhalation Rat = 500 ppm

hexamethylene-di-isocyanate

a) acute toxicity LD50 Oral Rat = 746 mg/kg
 LC50 Inhalation Vapour Rat = 0,124 mg/l 4h
 LD50 Skin Rat > 7000 mg/kg
 LD50 Skin Rabbit = 593 mg/kg
 LC50 Inhalation Rat = 0,06 mg/l 4h
 LD50 Oral Rat = 738 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
- k) Toxicological kinetics, metabolism and distribution information
- 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:

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
HDI oligomers, iminooxadiazindione	CAS: 28182-81-2 - EINECS: 931-297-3	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 199 mg/L 72
		c) Bacteria toxicity : EC50 Bacteria > 10000 mg/L 3
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
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : LC50 Fish = mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 500 mg/L 48
		b) Aquatic chronic toxicity : NOEC Fish = 47,5 mg/L - 14 d
		b) Aquatic chronic toxicity : NOEC Daphnia = 100 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
		a) Aquatic acute toxicity : NOEC Algae = 1000 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 161 mg/L 96h IUCLID
		a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 500 mg/L 48h IUCLID
hexamethylene-di-isocyanate	CAS: 822-06-0 - EINECS: 212-485-8 - INDEX: 615-011-00-1	a) Aquatic acute toxicity : EC50 Algae = 77,4 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish = 8,8 mg/L 96
		a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 26,1 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.

A waste code according to European waste catalogue (EWC) cannot be specified, due to dependence on the usage. Contact an authorized waste disposal service.

Product:

Do not dispose of waste into sewers.

Do not contaminate ponds, waterways or ditches with chemical or used container.

Send to an authorized waste disposal service.

Contaminated packaging:

Empty remaining content.

Dispose of as unused product.

Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

1139

14.2. UN proper shipping name

ADR-Shipping Name: COATING SOLUTION

IATA-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle undercoating, drum or barrel lining)

IMDG-Technical name: COATING SOLUTION (includes surface treatments or coatings used for industrial or other purposes such as vehicle under-coating, drum or barrel lining)

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

14.6. Special precautions for user

Road and Rail (ADR-RID):

ADR-Label: 3

ADR-Hazard identification number: 30

ADR-Special Provisions: -

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

Air (IATA):

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisions: A3

Sea (IMDG):

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisions: 955

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: N/A

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) : 340 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. 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 P5c	5000	50000

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, 40

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
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.

H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure .

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), 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
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
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

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
3.1/4/Inhal	Calculation method
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1	Calculation method
3.8/3	Calculation method
3.9/2	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