

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

1.1. Product identifier

Mixture identification:

Trade name: MAPEPLAN ADS 200

Trade code: 0502210

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

Recommended use: Adhesive

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: POLYGLASS S.p.A.

Registered office: Viale Jenner, 4 - 20159 Milano

Headquarter: Via dell'Artigianato, 34- 31047 Ponte di Piave (TV)

Responsible: info@polyglass.it

1.4. Emergency telephone number

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

POLYGLASS S.p.A. Tel: +39-0422-7547

Fax: +39-0422-854118 (office hours)

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Flam. Liq. 2	Highly flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
STOT SE 3	May cause drowsiness or dizziness.
Aquatic Acute 1	Very toxic to aquatic life.
Aquatic Chronic 1	Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

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

Pictograms and Signal Words



Danger

Hazard statements:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H410	Very 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.
P241	Use explosion-proof electrical equipment.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	Store locked up.

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

Special Provisions:

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

EUH208 Contains rosin; colophony. May produce an allergic reaction.

Contains:

cyclohexane

ethyl acetate

acetone; propan-2-one; propanone

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: MAPEPLAN ADS 200

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	cyclohexane	CAS:110-82-7 EC:203-806-2 Index:601-017-00-1	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	01-2119463273-41-XXXX
≥25 - <50 %	ethyl acetate	CAS:141-78-6 EC:205-500-4 Index:607-022-00-5	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119475103-46-xxxx
≥10 - <20 %	acetone; propan-2-one; propanone	CAS:67-64-1 EC:200-662-2 Index:606-001-00-8	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336, EUH066	01-2119471330-49-XXXX
≥0.25 - <0.49 %	reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8	Eye Irrit. 2, H319; Skin Irrit. 2, H315; Skin Sens. 1,1A,1B, H317; Aquatic Chronic 2, H411	01-2119456619-26-xxxx
≥0.25 - <0.49 %	rosin; colophony	CAS:8050-09-7 EC:232-475-7 Index:650-015-00-7	Skin Sens. 1,1A,1B, H317	01-2119480418-32-0000

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:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

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.

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

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
cyclohexane	SUVA	NNN		700	200	2800	800	

	NDS	NNN		300		1000		
	National	SWEDEN		1000	300	1300	370	SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		350	100	875	250	
	National	NORWAY		525	150			
	EU	NNN		700	200			
	National	NORWAY		172	50	344	100	
	ACGIH	NNN			100			CNS impair
	DFG	GERMANY	C			2800	800	
	ACGIH				100			CNS impairment
	National	SWEDEN		700	200			
	EU			700	200			Indicative
	National	FRANCE		700	200	1300	375	
	National	SPAIN		700	200			
	National	GREECE		700	200			
	National	DENMARK		172	50			
	National	GERMANY		700	200			
	National	PORTUGAL		700	200			
	National	NORWAY		525	150	656,25	187,5	
	National	BELGIUM		350	100			
	NDS	POLAND		300				
	NDSch	POLAND				1000		
	CHE	SWITZERLAND				2800	800	
	NDS	NETHERLANDS		700		1400		
	National	CZECH REPUBLIC		700				
	National	HUNGARY		700				
	Malaysia OEL	MALAYSIA		1030	300			
	National	ESTONIA		700	200			
	National	LATVIA		80	23			
	National	CZECH REPUBLIC	C			2000		
	National	SLOVAKIA		700	200			
	National	SLOVENIA		700	200			
	National	UNITED KINGDOM		350	100	1050	300	
	National	BULGARIA		700,0	200			
	National	ROMANIA		700	200			
	TUR	TURKEY		700	200			
	National	LITHUANIA		700	200			
	National	CROATIA		700	200			
ethyl acetate	SUVA	NNN		1400	400	2800	800	
	National	SWEDEN		500	150	1100	300	SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		1100	300	1800	500	
	National	NORWAY		550	150			
	NDS	NNN		200				
	NDSch	NNN		600				
	ACGIH	NNN			400			URT and eye irr
	National	NORWAY		540	150	1080	300	
	DFG	GERMANY	C			1500	400	
	ACGIH				400			eye and upper respiratory tract irritation

	National	SWEDEN		500	150				
	National	FRANCE		1400	400				
	National	SPAIN		734	200	1468	400		
	National	GREECE		734	200	1468	400		
	National	DENMARK		540	150				
	National	FINLAND		730	200	1470	400		
	National	GERMANY		730	200				
	National	PORTUGAL			400				
	National	NORWAY		734	200	917,5	250		
	National	BELGIUM		1461	400				
	NDS	POLAND		734					
	NDSCh	POLAND				1468			
	CHE	SWITZERLAND				1460	400		
	NDS	NETHERLANDS		734		1468			
	National	CZECH REPUBLIC		700					
	National	HUNGARY		734		1468			
	Malaysia OEL	MALAYSIA		1440	400				
	National	ESTONIA		500	150	1100	300		
	National	LATVIA		200	54	1468	400		
	National	CZECH REPUBLIC	C			900			
	National	SLOVAKIA	C			1100			
	National	SLOVAKIA		734	200				
	National	SLOVENIA		1400	400	1400	400		
	National	UNITED KINGDOM		734	200	1468	400		
	National	BULGARIA		734	200	1468	400		
	National	ROMANIA		400	111	500	139		
	National	LITHUANIA		500	150				
	National	LITHUANIA	C			1100	300		
	National	CROATIA		734	200	1468	400		
acetone; propan-2-one; propanone	SUVA	NNN		1200	500	2400	1000		
	National	SWEDEN		600	250	1200	500		SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		1200	500	1500	630		
	National	NORWAY		295	125				
	NDS	NNN		600					
	NDSCh	NNN		1800					
	National	NORWAY		600	250	1200	500		
	EU	NNN		1210	500				
	ACGIH	NNN			250		500		A4, BEI - URT and eye irr, CNS impair
	DFG	GERMANY	C			2400	1000		
	ACGIH				250		500		A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation
	National	SWEDEN		600	250				
	National	FRANCE		1210	500	2420	1000		
	National	SPAIN		1210	500				
	National	GREECE		1780		3560			

National	DENMARK	600	250			
National	GERMANY	1200	500			
National	PORTUGAL	1210	500		750	
National	NORWAY	295	125	368,75	156,25	
National	BELGIUM	1210	500	2420	1000	
NDS	POLAND	600				
NDSCh	POLAND			1800		
CHE	SWITZERLAND			2400	1000	
NDS	NETHERLANDS	1210		2420		
National	CZECH REPUBLIC	800				
National	HUNGARY	1210		2420		
Malaysia OEL	MALAYSIA	1187	500			
National	ESTONIA	1210	500			
National	LATVIA	1210	500			
National	CZECH REPUBLIC	C		1500		
National	SLOVAKIA	1210	500			
National	SLOVENIA	1210	500			
National	UNITED KINGDOM	1210	500	3620	1500	
National	BULGARIA	600		1400		
National	ROMANIA	1210	500			
TUR	TURKEY	1210	500			
National	LITHUANIA	1210	500	2420	1000	
National	CROATIA	1210	500			
EU		1210	500			Indicative
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	National	BULGARIA	1,0			
rosin; colophony	National	FRANCE	0,1			
	National	CZECH REPUBLIC	1			
	National	LATVIA	4			
	National	ROMANIA	0,1			
	National	CROATIA	0,05	0,15		

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
67-64-1	acetone; propan-2-one; propanone	25	mg/L	Urine	Acetone	End of turn

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
cyclohexane	110-82-7	0,207	Marine water		
		3,627	Freshwater sediments		
		3,627	Marine water sediments		
		0,207	Fresh Water		
ethyl acetate	141-78-6	0,26	Fresh Water		PNEC

		mg/l		
		0,026 mg/l	Marine water	PNEC
		1,65 mg/l	Intermittent release	PNEC
		1,25 mg/kg	Freshwater sediments	PNEC
		0,125 mg/kg	Marine water sediments	PNEC
		0,24 mg/kg	Soil	PNEC
		200 mg/kg	Oral	PNEC
acetone; propan-2-one; propanone	67-64-1	30,4 mg/kg	Freshwater sediments	
		3,04 mg/kg	Marine water sediments	
		10,6 mg/l	Fresh Water	
		1,06 mg/l	Marine water	
		29,5 mg/l	Soil	
		100 mg/l	Microorganisms in sewage treatments	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	0,006 mg/l	Fresh Water	
		0,0006 mg/l	Marine water	
		0,0627 mg/kg	Freshwater sediments	
		0,00627 mg/kg	Marine water sediments	

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
cyclohexane	110-82-7	700 mg/m3			Human Inhalation	Short Term, systemic effects	
		2016 mg/kg			Human Dermal	Long Term, systemic effects	
		700 mg/m3			Human Inhalation	Long Term, systemic effects	
			412 mg/m3		Human Inhalation	Short Term, systemic effects	
			1186 mg/kg		Human Dermal	Long Term, systemic effects	
			206 mg/m3		Human Inhalation	Long Term, systemic effects	
			59,4 mg/kg		Human Oral	Long Term, systemic effects	

ethyl acetate	141-78-6	1468 mg/m3	Human Inhalation	Short Term, systemic effects	DNEL
		4,5 mg/kg	Human Oral	Long Term, systemic effects	DNEL
		367 mg/m3	Human Inhalation	Long Term, local effects	DNEL
		1468 mg/m3	Human Inhalation	Short Term, local effects	DNEL
		63 mg/kg	Human Dermal	Long Term, systemic effects	DNEL
		734 mg/m3	Human Inhalation	Long Term, systemic effects	DNEL
		734 mg/m3	Human Inhalation	Long Term, local effects	DNEL
		734 mg/m3	Human Inhalation	Short Term, systemic effects	DNEL
		734 mg/m3	Human Inhalation	Short Term, local effects	DNEL
		37 mg/kg	Human Dermal	Long Term, systemic effects	DNEL
acetone; propan-2-one; propanone	67-64-1	186 mg/kg	Human Dermal	Long Term, systemic effects	
		2420 mg/m3	Human Inhalation	Short Term, systemic effects	
		1210 mg/m3	Human Inhalation	Long Term, systemic effects	
		62 mg/kg	Human Oral	Long Term, systemic effects	
		62 mg/kg	Human Dermal	Long Term, systemic effects	
		200 mg/m3	Human Inhalation	Long Term, systemic effects	
		2420 mg/m3	Human Inhalation	Short Term, local effects	
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	25068-38-6	8,3 mg/kg	Human Dermal	Short Term, systemic effects	
		12,25 mg/m3	Human Inhalation	Short Term, systemic effects	
		8,3 mg/kg	Human Dermal	Long Term, systemic effects	
		12,25 mg/m3	Human Inhalation	Long Term, systemic effects	
		3,571 mg/kg	Human Dermal	Short Term, systemic effects	
		0,75 mg/kg	Human Oral	Short Term, systemic effects	
		3,571 mg/kg	Human Dermal	Long Term, systemic effects	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

No special precaution must be adopted for normal use.

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: Liquid Yellow

Odour: solvent like

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 55 °C (131 °F)

Flash point: -17 °C (1 °F)

Evaporation rate: N.A.

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

Vapour density: ==

Vapour pressure: N.A.

Relative density: 0.90 g/cm³

Solubility in water: Insoluble

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

Auto-ignition temperature: 240.00 °C - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: 3,100.00 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:

cyclohexane	a) acute toxicity	LC50 Inhalation Rat > 32880 mg/m ³ 4h LD50 Oral Rat > 5000 mg/kg LD50 Skin Rabbit > 2000 mg/kg LD50 Skin Rabbit > 2000 mg/kg LC50 Inhalation Rat > 9500 ppm 4h LD50 Oral Rat = 12705 mg/kg
ethyl acetate	a) acute toxicity	LC50 Inhalation Rat = 1600 mg/l LD50 Oral Rabbit = 4935 mg/kg LD50 Oral Rat = 11,3 g/kg LD50 Skin Rabbit > 20000 mg/kg LD50 Oral Mouse = 4100 mg/kg LD50 Skin Rabbit > 18000 mg/kg LC50 Inhalation Rat = 4000 ppm 4h LD50 Oral Rat = 5620 mg/kg
acetone; propan-2-one; propanone	a) acute toxicity	LD50 Oral Rat = 5800 mg/kg LD50 Skin Rabbit = 20000 mg/kg LC50 Inhalation Rat = 76 mg/l 4h LD50 Skin Rabbit > 15700 mg/kg LC50 Inhalation Rat = 50100 mg/m ³ 8h LD50 Oral Rat = 5800 mg/kg
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight <= 700)	a) acute toxicity	LD50 Oral Rat > 15000 mg/kg LD50 Skin Rabbit > 23000 mg/kg LD50 Oral Rat = 11400 mg/kg
	i) STOT-repeated exposure	NOAEL Oral Rat = 50 mg/kg NOAEL Skin Rat = 100 mg/kg
rosin; colophony	a) acute toxicity	LD50 Oral Rat = 7600 mg/kg LD50 Skin Rabbit > 2500 mg/kg LC50 Inhalation Rat = 1,5 mg/l 4h

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
- 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:

Very toxic to aquatic organisms.

Very 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
cyclohexane	CAS: 110-82-7 - EINECS: 203-806-2 - INDEX: 601-017-00-1	a) Aquatic acute toxicity : EC50 Daphnia = 0,9 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 4,53 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 3,4 mg/L 72 a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 3,96 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23,03 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 24,99 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 48,87 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus > 500 mg/L 72h IUCLID
ethyl acetate	CAS: 141-78-6 - EINECS: 205-500-4 - INDEX: 607-022-00-5	a) Aquatic acute toxicity : EC50 Daphnia = 260 mg/L 48 a) Aquatic acute toxicity : LC50 Algae = 3300 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 230 mg/L 96 b) Aquatic chronic toxicity : LC50 Algae = 5600 mg/L 48 a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 220 mg/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 484 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 352 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna = 560 mg/L 48h EPA
acetone; propan-2-one; propanone	CAS: 67-64-1 - EINECS: 200-662-2 - INDEX: 606-001-00-8	a) Aquatic acute toxicity : EC50 Daphnia = 6100 mg/L 48 a) Aquatic acute toxicity : LC50 Fish = 5540 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 302 mg/L 96 a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96 a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 4,74 mL/L 96h EPA a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 6210 mg/L 96h IUCLID a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 8300 mg/L 96h EPA a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 10294 mg/L 48h EPA

reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight <= 700) CAS: 25068-38-6 - EINECS: 500-033-5 - INDEX: 603-074-00-8

rosin; colophony CAS: 8050-09-7 - EINECS: 232-475-7 - INDEX: 650-015-00-7

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 12600 mg/L 48h IUCLID

G : LC50 Avian Phasianus colchicus > 40000 ppm 5d IUCLID

G : LC50 Avian Coturnix coturnix japonica > 40000 ppm 5d IUCLID

d) Terrestrial toxicity : LC50 Worm Eisenia foetida 200 µg/cm² 48h IUCLID

a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96

a) Aquatic acute toxicity : EC50 Daphnia > 1,8 mg/L 48

a) Aquatic acute toxicity : LC50 Algae > 11 mg/L 72

a) Aquatic acute toxicity : LC50 Daphnia = 1,3 mg/L 96

b) Aquatic chronic toxicity : NOEC Daphnia = 0,3 mg/L

a) Aquatic acute toxicity : EC50 Algae Desmodesmus subspicatus = 400 mg/L 72h IUCLID

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna 3,8 mg/L 48h 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

1133

14.2. UN proper shipping name

ADR-Shipping Name: ADHESIVES (CYCLOHEXANE - HEXANES)

IATA-Technical name: ADHESIVES (CYCLOHEXANE - HEXANES)

IMDG-Technical name: ADHESIVES (CYCLOHEXANE - HEXANES)

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: II

IATA-Packing group: II

IMDG-Packing group: II

14.5. Environmental hazards

Marine pollutant: Yes

Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR-Hazard identification number: 33

ADR-Special Provisions: 640C

ADR-Transport category (Tunnel restriction code): 2 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 353

IATA-Cargo Aircraft: 364

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category B

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: -

IMDG-EMS: F-E, S-D

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

N.A.

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. g/l

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 E1	100	200

German Water Hazard Class.

2

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: 57

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.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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.

Code	Hazard class and hazard category	Description
2.6/2	Flam. Liq. 2	Flammable liquid, Category 2
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
3.4.2/1-1A-1B	Skin Sens. 1,1A,1B	Skin Sensitisation, Category 1,1A,1B
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
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

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
2.6/2	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.8/3	Calculation method
4.1/A1	Calculation method
4.1/C1	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
- 5. FIRE-FIGHTING MEASURES
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION