Safety Data Sheet MAPEPLAN ADS 310

Safety Data Sheet dated: 17/01/2020 - version 2



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

1.1. Product identifier

Mixture identification:

Trade name: MAPEPLAN ADS 310 Trade code: 76702020001

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)

Responsable: 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)

Aerosols 1 Extremely flammable aerosol. Pressurized container: may burst if heated.

Skin Irrit. 2 Causes skin irritation.

Eye Irrit. 2 Causes serious eye 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



Danger

Hazard statements:

H222+H229 Extremely flammable aerosol. Pressurized container: may burst if heated.

H315 Causes skin irritation.
 H319 Causes serious eye 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.

P211 Do not spray on an open flame or other ignition source.

P251 Do not pierce or burn, even after use.
P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

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

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 1 of 15

Contains:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

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 310

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

Quantity	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	dimethyl ether	CAS:115-10-6 EC:204-065-8	Flam. Gas 1, H220; Press. Gas (Liq.), H280	01-2119472128-37-XXXX
≥25 - <50 %	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane		Flam. Liq. 2, H225; Skin Irrit. 2, H315; STOT SE 3, H336; Asp. Tox. 1, H304; Aquatic Chronic 2, H411	
≥20 - <25 %	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
≥0.49 - <1 %	toluene	CAS:108-88-3 EC:203-625-9 Index:601-021-00-3	Flam. Liq. 2, H225; Repr. 2, H361d; Asp. Tox. 1, H304; STOT RE 2, H373; Skin Irrit. 2, H315; STOT SE 3, H336	01-2119471310-51-XXXX
≥0.49 - <1 %	n-hexane	CAS:110-54-3 EC:203-777-6 Index:601-037-00-0	Flam. Liq. 2, H225; Skin Irrit. 2, H315; STOT RE 2, H373; Asp. Tox. 1, H304; STOT SE 3, H336; Repr. 2, H361f; Aquatic Chronic 2, H411	
≥0.1 - <0.25 %	zinc bis(dibenzyldithiocarbamate)	CAS:14726-36-4 EC:238-778-0	Aquatic Acute 1, H400; Aquatic Chronic 1, H410, M-Chronic:1, M-Acute:1	01-2119543708-31-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

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

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eves contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

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

In case of Inhalation:

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

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

Eye irritation

Eye damages

Skin Irritation

Erythema

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 2 of 15

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.

 $\label{lem:contaminated} \mbox{ Contaminated clothing should be changed before entering eating areas.}$

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 $^{\circ}$ 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 3 ppm	Short Term mg/m3	Term	Behaviour Note
dimethyl ether	DFG	GERMANY	С			15200	8000	
	National	SWEDEN		950	500			

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 3 of 15

	National	FRANCE		1920	1000				
	National	SPAIN		1920	1000				
	National	GREECE		1920	1000				
	National	DENMARK		1920	1000				
	National	FINLAND		2000	1000				
	National	GERMANY		1900	1000				
	National	PORTUGAL		1920	1000				
	National	NORWAY		384	200	480	250		
	National	BELGIUM		1920	1000				
	NDS	POLAND		1000					
	NDS	NETHERLANDS		950		1500			
	National	CZECH REPUBLIC		1000					
	National	HUNGARY		1920		7680			
	National	ESTONIA		1920	1000				
	National	LATVIA		1920	1000				
	National	CZECH REPUBLIC	С			2000			
	National	SLOVAKIA		1920	1000				
	National	SLOVENIA		1920	1000				
	National	UNITED KINGDOM		766	400	958	500		
	National	BULGARIA		1920	1000				
	National	ROMANIA		1920	1000				
	TUR	TURKEY		1920	1000				
	National	LITHUANIA		1920	1000	2280	1500		
	National	CROATIA		1920	1000				
	EU			1920	1000			Indicative	
	National	HUNGARY		1920					
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	С			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		

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 4 of 15

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	С			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	
SUVA	NNN		190	50	760	200		
National	SWEDEN		192	50	384	100		SWEDEN, Short term value, 15 minutes average value
National	FINLAND		81	25	380	100		FINLAND, hud, buller
National	NORWAY		94	25				NORWAY, H
NDS	NNN		100					
NDSCh	NNN		200					
National	NORWAY		94	25	188	50		
EU	NNN		192	50	384	100		Skin
ACGIH	NNN			20				A4, BEI - Visual impair, female repro, pregnancy loss
DFG	GERMANY	С			760	200		
ACGIH				20				A4 - Not Classifiable as a Human Carcinogen;female reproductive damage;pregnancy loss;visual impairment
National	SWEDEN		192	50				
EU			192	50	384	100	Indicative	Possibility of significant uptake through the skin
National	FRANCE		76,8	20	384	100		
National	SPAIN		192	50	384	100		
National	GREECE		192	50	384	100		
National	DENMARK		94	25				
National	FINLAND		81	25	380	100		
National	GERMANY		190	50				
National	PORTUGAL		192	50	384	100		
National	NORWAY		94	25	141	37,5		
National	BELGIUM		77	20	384	100		
NDS	POLAND		100					

toluene

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 5 of 15

NDSCh								
	POLAND				200			
CHE	SWITZERLAND				760	200		
NDS	NETHERLANDS		150		384			
National	CZECH		200					
	REPUBLIC							
National	HUNGARY		190		380			
Malaysia	MALAYSIA		188	50				Skin notation
OEL								
National	ESTONIA		192	50	384	100		
National	LATVIA		50	14	150	40		
National	CZECH REPUBLIC	С			500			
National	SLOVAKIA	С			384			
National	SLOVAKIA		192	50				
National	SLOVENIA		192	50	384	100		
National	UNITED KINGDOM		191	50	384	100		
National	BULGARIA		192,0	50	384,0	100		
National	ROMANIA		192	50	384	100		
TUR	TURKEY		192	50	384	100		
National	LITHUANIA		192	50	384	100		
National	CROATIA		192	50	384	100		
DFG	GERMANY	С			1440	400		
ACGIH				50				Skin - potential significant
								contribution to overall
								exposure by the cutaneous route; CNS impairment; eye irritation; peripheral neuropathy
								пецгорацту
National	SWEDEN		72	20				
EU			72	20			Indicative	
EU National	FRANCE		72 72	20 20			Indicative	
EU National National	FRANCE SPAIN		72 72 72	20 20 20			Indicative	
EU National National National	FRANCE SPAIN GREECE		72 72 72 72	20 20 20 20			Indicative	
EU National National National National	FRANCE SPAIN GREECE DENMARK		72 72 72 72 72	20 20 20 20 20 20			Indicative	
EU National National National National	FRANCE SPAIN GREECE DENMARK FINLAND		72 72 72 72 72 72 72	20 20 20 20 20 20 20			Indicative	
EU National National National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY		72 72 72 72 72 72 72 180	20 20 20 20 20 20 20 50			Indicative	
EU National National National National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL		72 72 72 72 72 72 72 180 72	20 20 20 20 20 20 20 50	100	20	Indicative	
EU National National National National National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY		72 72 72 72 72 72 72 180 72	20 20 20 20 20 20 20 50 20	108	30	Indicative	
EU National National National National National National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM		72 72 72 72 72 72 180 72 72 72	20 20 20 20 20 20 20 50	108	30	Indicative	
EU National National National National National National National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND		72 72 72 72 72 72 72 180 72	20 20 20 20 20 20 20 50 20			Indicative	
EU National CHE	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND		72 72 72 72 72 72 180 72 72 72 72	20 20 20 20 20 20 20 50 20	1440	30 400	Indicative	
EU National NDS CHE NDS	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS		72 72 72 72 72 72 180 72 72 72 72	20 20 20 20 20 20 20 50 20			Indicative	
EU National CHE	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND		72 72 72 72 72 72 180 72 72 72 72	20 20 20 20 20 20 20 50 20	1440		Indicative	
EU National NDS CHE NDS	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH		72 72 72 72 72 72 180 72 72 72 72	20 20 20 20 20 20 20 50 20	1440		Indicative	
EU National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC		72 72 72 72 72 72 180 72 72 72 72 72	20 20 20 20 20 20 20 50 20	1440		Indicative	Skin notation
EU National NDS CHE NDS National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY		72 72 72 72 72 72 180 72 72 72 72 72 72	20 20 20 20 20 20 50 20 20 20	1440		Indicative	Skin notation
EU National NDS CHE NDS National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY MALAYSIA		72 72 72 72 72 72 180 72 72 72 72 72 72 70	20 20 20 20 20 20 50 20 20 20	1440		Indicative	Skin notation
EU National NDS CHE NDS National National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY MALAYSIA	C	72 72 72 72 72 72 180 72 72 72 72 72 72 71 72 72 77 70 77 77 77 77 77	20 20 20 20 20 50 20 20 20 20	1440		Indicative	Skin notation
EU National NDS CHE NDS National National National National National National National Malaysia OEL National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY MALAYSIA ESTONIA LATVIA CZECH REPUBLIC		72 72 72 72 72 72 180 72 72 72 72 72 72 71 72 72 77 70 77 77 77 77 77	20 20 20 20 20 50 20 20 20 20	1440 144 200		Indicative	Skin notation
EU National NDS CHE NDS National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY MALAYSIA ESTONIA LATVIA CZECH REPUBLIC SLOVAKIA	C C	72 72 72 72 72 72 180 72 72 72 72 70 72 176	20 20 20 20 20 50 20 20 20 20	1440 144		Indicative	Skin notation
EU National NDS CHE NDS National National National National National National National Malaysia OEL National National	FRANCE SPAIN GREECE DENMARK FINLAND GERMANY PORTUGAL NORWAY BELGIUM POLAND SWITZERLAND NETHERLANDS CZECH REPUBLIC HUNGARY MALAYSIA ESTONIA LATVIA CZECH REPUBLIC		72 72 72 72 72 72 180 72 72 72 72 72 72 71 72 72 77 70 77 77 77 77 77	20 20 20 20 20 50 20 20 20 20	1440 144 200		Indicative	Skin notation

n-hexane

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 6 of 15

National	SLOVENIA	72	20		
National	UNITED KINGDOM	72	20	216	60
National	BULGARIA	72,0	20		
National	ROMANIA	72	20		
TUR	TURKEY	72	20		
National	LITHUANIA	72	20		
National	CROATIA	72	20		

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
108-88-3	toluene	0,02	mg/L	Blood	Toluene	Before last turn of the working week
		0,03	mg/L	Urine	Toluene	End of turn
		0,3	MGGCREAT	Urine	O-Cresol	End of turn
110-54-3	n-hexane	0,4	mg/L	Urine	Hexanedione	End of turn; End of working week

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
dimethyl ether	115-10-6	0,155 mg/l	Fresh Water		
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		
toluene	108-88-3	16,39 mg/kg	Freshwater sediments		PNEC
		2,31 mg/kg	Soil		PNEC
		16,39 mg/kg	Marine water sediments		PNEC
		0,68 mg/l	Fresh Water		PNEC
		0,68 mg/l	Marine water		PNEC
		0,68 mg/l	Intermittent release		PNEC
		6,58 mg/l	Microorganisms in sewage treatments		

Derived No Effect Level. (DNEL)

Component CAS-No. Worker Worker Consu Exposure Exposure Frequency Remark Industr Profess mer y ional Exposure Exposure Frequency Remark

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 7 of 15

dimethyl ether	115-10-6	1894 mg/m3	471 ppm	Human Inhalation	Long Term, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane		2035 mg/kg	699 mg/kg	Human Ora	l Long Term, systemic effects
		773 mg/kg	699 mg/kg	Human Dermal	Long Term, systemic effects
			608 mg/m3	Human Inhalation	Long Term, systemic effects
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 Ora	l 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
toluene	108-88-3	384 mg/m3	226 mg/kg	Human Dermal	Long Term, systemic effects
		192 mg/m3	56,5 mg/m3	Human Inhalation	Long Term, systemic effects
			8,13 mg/kg	Human Ora	l Long Term, systemic effects
			226 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:

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 >=0,5mm; breakthrough time >=480min.

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

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

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

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

Respiratory protection:

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

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 8 of 15

Appearance and colour: aerosol various

Odour: ether-like
Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.
Initial boiling point and boiling range: N.A.

Flash point: -41 °C (-42 °F) Evaporation rate: N.A.

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

Vapour density: N.A. Vapour pressure: N.A. Relative density: N.A. Solubility in water: N.A.

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

Auto-ignition temperature: 226.00 °C - No explosive or spontaneous ignition in contact with air at room temperature

Decomposition temperature: N.A.

Viscosity: N.A.

Kinematic viscosity: Kv > 20.5

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:

dimethyl ether a) acute toxicity LC50 Inhalation Rat = 308 mg/l 4h

LC50 Inhalation Gas Rat = 164

LC50 Inhalation Rat = 164000 ppm 4h

Hydrocarbons, C6-C7, n- a) acute toxicity

alkanes, isoalkanes, cyclics, <5% n-hexane

LD50 Oral Rat = 5840 mg/kg

LD50 Skin Rat = 2920 mg/kg

LC50 Inhalation Vapour Rat = 25,2 mg/l

acetone; propan-2-one; a) acute toxicity

propanone

LD50 Oral Rat = 5800 mg/kg

LD50 Skin Rabbit = 20000 mg/kg LC50 Inhalation Rat = 76 mg/l 4h

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 9 of 15

LD50 Skin Rabbit > 15700 mg/kg LC50 Inhalation Rat = 50100 mg/m3 8h

LD50 Oral Rat = 5800 mg/kg

toluene a) acute toxicity LC50 Inhalation Mouse = 5320 ppm

LD50 Oral Rat = 5580 mg/kg LD50 Skin Rabbit = 12124 mg/kg LC50 Inhalation Rat 28,1 mg/l 4h LD50 Skin Rabbit = 12000 mg/kg LC50 Inhalation Rat = 12,5 mg/l 4h

LD50 Oral Rat = 2600 mg/kg

n-hexane a) acute toxicity LC50 Inhalation Vapour = 17,6 mg/l

LD50 Skin Rabbit = 3000 mg/kg LC50 Inhalation Rat = 48000 ppm 4h

LD50 Oral Rat = 25 g/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

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, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane		a) Aquatic acute toxicity :	EC50 Daphnia > 500 mg/L 48
		a) Aquatic acute toxicity :	EC50 Daphnia = 3 mg/L 48
acetone; propan-2-one; propanone	CAS: 67-64-1 - EINECS: 200-662-2 - INDEX: 606-001-00-8	, ,	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 : IUCLID	LC50 Fish Pimephales promelas 6210 mg/L 96h
		a) Aquatic acute toxicity: EPA	LC50 Fish Lepomis macrochirus = 8300 mg/L 96h
		a) Aquatic acute toxicity :	EC50 Daphnia Daphnia magna 10294 mg/L 48h EPA

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 10 of 15

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

toluene CAS: 108-88-3 - EINECS: a) Aquatic acute toxicity: LC50 Daphnia = 3,78 mg/L 48 203-625-9 - INDEX: 601-

021-00-3

a) Aquatic acute toxicity: EC50 Fish = 57,68 mg/L 96
 a) Aquatic acute toxicity: EC50 Algae = 134 mg/L 3
 a) Aquatic acute toxicity: LC50 Fish = 5,5 mg/L 96

a) Aquatic acute toxicity: LC50 Fish Pimephales promelas 15,22 mg/L 96h

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 12,6 mg/L 96h FPA

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss 5,89 mg/L 96h EPA

a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss 14,1 mg/L 96h EPA
 a) Aquatic acute toxicity: LC50 Fish Oncorhynchus mykiss = 5,8 mg/L 96h

a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss = 5.8 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 11 mg/L 96h EPA

a) Aquatic acute toxicity : LC50 Fish Oryzias latipes = 54 mg/L 96 h EPA

a) Aquatic acute toxicity: LC50 Fish Poecilia reticulata = 28,2 mg/L 96h EPA

a) Aquatic acute toxicity: LC50 Fish Poecilia reticulata 50,87 mg/L 96h EPA

a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna 5,46 mg/L 48h EPA
a) Aquatic acute toxicity: EC50 Daphnia Daphnia magna = 11,5 mg/L 48h

IUCLID

a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata > 433

mg/L 96h IUCLID

a) Aquatic acute toxicity: EC50 Algae Pseudokirchneriella subcapitata = 12,5

mg/L 72h EPA

CAS: 110-54-3 - EINECS: a) Aquatic acute toxicity: LC50 Daphnia = 10 mg/L

203-777-6 - INDEX: 601-

037-00-0

a) Aquatic acute toxicity: LC50 Algae = 10 mg/La) Aquatic acute toxicity: LC50 Fish = 10 mg/L

a) Aquatic acute toxicity: LC50 Fish Pimephales promelas 2,1 mg/L 96h EPA

12.2. Persistence and degradability

N.A.

n-hexane

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.

Date 23/06/2020 Production Name MAPEPLAN ADS 310 Page n. 11 of 15

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

3501

14.2. UN proper shipping name

ADR-Shipping Name: CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. IATA-Technical name: CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S. IMDG-Technical name: CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.

14.3. Transport hazard class(es)

ADR-Class: 2

IATA-Class: 2.1

IMDG-Class: 2.1

14.4. Packing group

ADR-Packing Group:
IATA-Packing group: -

IMDG-Packing group: -

14.5. Environmental hazards

Marine pollutant: Yes
Environmental Pollutant: Yes

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 2.1

ADR-Hazard identification number: 23 ADR-Special Provisions: 274 659

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

Air (IATA):

IATA-Passenger Aircraft: Forbidden

IATA-Cargo Aircraft: 218

IATA-Label: 2.1

IATA-Subsidiary hazards: -

IATA-Erg: 10L

IATA-Special Provisioning: A1 A187

Sea (IMDG):

IMDG-Stowage Code: Category D SW2

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 274 362

IMDG-Page: N/A IMDG-Label: N/A IMDG-EMS: F-D, S-U 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): 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

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 12 of 15

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 Lower-tie according to Annex 1, part 1 (tonnes)

Lower-tier threshold (tonnes)

Upper-tier threshold (tonnes)

(tonnes

Products belongs to category

P3a

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: 40

Restrictions related to the substances contained: 48

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

Asp. Tox. 1

Skin Irrit. 2

Eye Irrit. 2

STOT SE 3

Repr. 2

23/06/2020

3.10/1

3.2/2

3.3/2 3.7/2

3.8/3

Date

Code	Description	Description		
EUH066	Repeated exposure may cause skin drynes	Repeated exposure may cause skin dryness or cracking.		
H220	Extremely flammable gas.			
H222+H229	Extremely flammable aerosol. Pressurized	container: may burst if heated.		
H225	Highly flammable liquid and vapour.			
H280	Contains gas under pressure; may explode	e if heated.		
H304	May be fatal if swallowed and enters airwa	ys.		
H315	Causes skin irritation.			
H319	Causes serious eye irritation.			
H336	May cause drowsiness or dizziness.			
H361d	Suspected of damaging the unborn child.			
H361f	Suspected of damaging fertility.			
H373	May cause damage to organs through prolonged or repeated exposure.			
H373	May cause damage to organs through prole	onged or repeated exposure if inhaled.		
H400	Very toxic to aquatic life.			
H410	Very toxic to aquatic life with long lasting e	effects.		
H411	Toxic to aquatic life with long lasting effect	S.		
Code	Hazard class and hazard category	Description		
2.2/1	Flam. Gas 1	Flammable gas, Category 1		
2.3/1	Aerosols 1	Aerosol, Category 1		
2.5/L	Press. Gas (Liq.) Gases under pressure (Liquefied gas)			
2.6/2	Flam. Liq. 2 Flammable liquid, Category 2			

Production Name MAPEPLAN ADS 310 Page n. 13 of 15

Specific target organ toxicity — single exposure, Category 3

Aspiration hazard, Category 1

Reproductive toxicity, Category 2

Skin irritation, Category 2

Eye irritation, Category 2

3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2
4.1/A1	Aquatic Acute 1	Acute aquatic hazard, category 1
4 1/C1	Aquatic Chronic 1	Chronic (long torm) 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]:

(EC) Nr. 1272/2008	
2.3/1	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.8/3	Calculation method
4.1/C2	Calculation method

Classification according to Regulation Classification procedure

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

 ${\it CLP: Classification, Labeling, Packaging.}$

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.

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 14 of 15

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:

- 5. FIRE-FIGHTING MEASURES

- 13. DISPOSAL CONSIDERATIONS
- 15. REGULATORY INFORMATION

 Date
 23/06/2020
 Production Name
 MAPEPLAN ADS 310
 Page n. 15 of 15