SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

MEGAPLAST MM A

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

1.1. Product identifier

Product name : MEGAPLAST MM A
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

1.2.1 Relevant identified uses

Resin

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*
Industrielaan 5B
B-2250 Olen
☎ +32 14 25 76 40
🖷 +32 14 22 02 66
info@novatio.be
*NOVATIO is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
🖷 +32 14 85 97 38
info@novatech.be

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Class	Category	Hazard statements
Flam. Liq.	category 2	H225: Highly flammable liquid and vapour.
Skin Sens.	category 1	H317: May cause an allergic skin reaction.
Eye Dam.	category 1	H318: Causes serious eye damage.
Skin Irrit.	category 2	H315: Causes skin irritation.
STOT SE	category 3	H335: May cause respiratory irritation.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements

Contains: methyl methacrylate; maleic acid; methacrylic acid; colophony; tosyl chloride; propylidynetrimethanol, ethoxylated, esters with acrylic acid; bis[2-(acryloyloxy)ethyl] hydrogen phosphate; 2-(phosphonooxy)ethyl acrylate.

Signal word Danger

H-statements

H225 Highly flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

P-statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves, protective clothing and eye protection/face protection.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard
Caution! Substance is absorbed through the skin

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
methyl methacrylate 01-2119452498-28	80-62-6 201-297-1	50% <C<75%	Flam. Liq. 2; H225 Skin Sens. 1; H317 Skin Irrit. 2; H315 STOT SE 3; H335	(1)(2)(10)	Constituent	
maleic acid 01-2119488705-25	110-16-7 203-742-5	C<5%	Skin Sens. 1; H317 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Sens. 1; H317: C≥0.1%, (CLP Annex VI (ATP 1))	(1)(10)	Constituent	
methacrylic acid 01-2119463884-26	79-41-4 201-204-4	C<5%	Acute Tox. 3; H311 Acute Tox. 4; H302 Skin Corr. 1A; H314 Eye Dam. 1; H318 Eye Dam. 1; H318: 3%≤C<10% , (ECHA) Eye Irrit. 2; H319: 1%≤C<3%, (ECHA) Skin Corr. 1A; H314: C≥10%, (ECHA) Skin Irrit. 2; H315: 1%≤C<10% , (ECHA) Acute Tox. 3; H311: C≥25%, (ECHA) Acute Tox. 4; H312: 10% ≤C<25%, (ECHA) STOT SE 3; H335: C≥1%, (ECHA)	(1)(2)(10)	Constituent	
colophony 01-2119480418-32	8050-09-7 232-475-7	C<3%	Skin Sens. 1; H317	(1)(2)(10)	Constituent	
2,6-di-tert-butyl-p-cresol 01-2119555270-46	128-37-0 204-881-4	C<2.5%	Aquatic Chronic 1; H410	(1)(2)	Constituent	M: 1 (Chronic, ECHA (registration dossier))

α,α-dimethylbenzyl hydroperoxide 01-2119475796-19	80-15-9 201-254-7	C<1%	Org. Perox. E; H242 Acute Tox. 3; H331 Acute Tox. 4; H312 Acute Tox. 4; H302 STOT RE 2; H373 Skin Corr. 1B; H314 Eye Dam. 1; H318 Aquatic Chronic 2; H411 Skin Corr. 1B; H314: C≥10%, (CLP Annex VI (ATP 0)) Eye Dam. 1; H318: 3%≤C<10% , (CLP Annex VI (ATP 0)) Skin Irrit. 2; H315: 3%≤C<10% , (CLP Annex VI (ATP 0)) Eye Irrit. 2; H319: 1%≤C<3%, (CLP Annex VI (ATP 0)) STOT SE 3; H335: C<10%, (CLP Annex VI (ATP 0))	(1)(10)	Constituent	
tosyl chloride	98-59-9 202-684-8	C<1%	Met. Corr. 1; H290 Skin Sens. 1A; H317 Eye Dam. 1; H318 Skin Irrit. 2; H315	(1)(2)	Constituent	
propylidynetrimethanol, ethoxylated, esters with acrylic acid	28961-43-5 500-066-5	C<1%	Skin Sens. 1; H317 Eye Irrit. 2; H319	(1)(10)	Constituent	
bis[2-(acryloyloxy)ethyl] hydrogen phosphate	40074-34-8 254-783-0	C<1%	Skin Sens. 1B; H317 Eye Dam. 1; H318 Skin Irrit. 2; H315	(1)	Constituent	
2-(phosphonooxy)ethyl acrylate	32120-16-4 250-927-1	C<1%	Skin Sens. 1B; H317 Eye Dam. 1; H318 Skin Irrit. 2; H315	(1)	Constituent	

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1. Description of first aid measures

General:
Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:
Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:
If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:
Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult a doctor/medical service.

After ingestion:
Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:
Irritation of the respiratory tract. Irritation of the nasal mucous membranes.

After skin contact:
Tingling/irritation of the skin.

After eye contact:
Corrosion of the eye tissue.

After ingestion:
AFTER INGESTION OF HIGH QUANTITIES: Burns to the gastric/intestinal mucosa. Possible esophageal perforation.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:

Small fire: Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting class B foam extinguisher, Quick-acting CO2 extinguisher.

Major fire: Class B foam (not alcohol-resistant).

5.1.2 Unsuitable extinguishing media:

Small fire: Water (quick-acting extinguisher, reel); risk of puddle expansion.

Major fire: Water; risk of puddle expansion.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Do not move the load if exposed to heat. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment. Exposure to fire/heat: keep upwind. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel

See section 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See section 8.2

6.2. Environmental precautions

Contain released product. Dam up the liquid spill. Try to reduce evaporation. Take account of toxic/corrosive precipitation water. Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into inert absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges. Insufficient ventilation: keep naked flames/sparks away. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact. Remove contaminated clothing immediately. Keep container tightly closed. Do not discharge the waste into the drain.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Meet the legal requirements. Store in a dry area. Keep container in a well-ventilated place. Fireproof storeroom. Keep out of direct sunlight. Keep only in the original container.

7.2.2 Keep away from:

Heat sources, ignition sources, oxidizing agents.

7.2.3 Suitable packaging material:

No data available

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

EU

Methyl methacrylate	Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value)	50 ppm
	Short time value (Indicative occupational exposure limit value)	100 ppm

Belgium

2,6-Di-tert-butyl-p-crésol	Time-weighted average exposure limit 8 h	2 mg/m³ **(1)**
Acide méthacrylique	Time-weighted average exposure limit 8 h	20 ppm
	Time-weighted average exposure limit 8 h	71 mg/m³
Méthacrylate de méthyle	Time-weighted average exposure limit 8 h	50 ppm
	Time-weighted average exposure limit 8 h	208 mg/m³
	Short time value	100 ppm
	Short time value	416 mg/m³

(1) vapeur et aérosol

The Netherlands

Methylmethacrylaat	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	50 ppm
	Time-weighted average exposure limit 8 h (Public occupational exposure limit value)	205 mg/m³
	Short time value (Public occupational exposure limit value)	100 ppm
	Short time value (Public occupational exposure limit value)	410 mg/m³

France

2,6-Di-tert-butyl-p-crésol	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	10 mg/m³
Acide méthacrylique	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	20 ppm
	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	70 mg/m³
Colophane (produits de décomposition des baguettes de soudure, exprimés en aldéhyde formique)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	0.1 mg/m³
Méthacrylate de méthyle	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	50 ppm
	Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante)	205 mg/m³
	Short time value (VRC: Valeur réglementaire contraignante)	100 ppm
	Short time value (VRC: Valeur réglementaire contraignante)	410 mg/m³

Germany

2,6-Di-tert-butyl-p-kresol	Time-weighted average exposure limit 8 h (TRGS 900)	10 mg/m³ **(1)**
	Summe aus Dampf und Aerosolen.	
Methacrylsäure	Time-weighted average exposure limit 8 h (TRGS 900)	180 mg/m³ **(2)**
	Time-weighted average exposure limit 8 h (TRGS 900)	50 ppm **(2)**
Methyl-methacrylat	Time-weighted average exposure limit 8 h (TRGS 900)	210 mg/m³ **(3)**
	Time-weighted average exposure limit 8 h (TRGS 900)	50 ppm **(3)**
α,α,-Dimethylbenzylhydroperoxid	*Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen.*	

(1) Einatembare Fraktion; UF: 4 (II)
(2) UF: 2 (I)
(3) UF: 2 (I)

Austria

2,6-Di-tert-butyl-p-kresol	Tagesmittelwert (MAK)	10 mg/m³
Methacrylsäure	Tagesmittelwert (MAK)	20 ppm
	Tagesmittelwert (MAK)	70 mg/m³
Methylmethacrylat	Tagesmittelwert (MAK)	50 ppm
	Tagesmittelwert (MAK)	210 mg/m³
	Kurzzeitwert 5(Mow) 8x (MAK)	100 ppm
	Kurzzeitwert 5(Mow) 8x (MAK)	420 mg/m³

UK

2,6-Di-tert-butyl-p-cresol	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m³
Methacrylic acid	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	20 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	72 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	40 ppm
	Short time value (Workplace exposure limit (EH40/2005))	143 mg/m³
Methyl methacrylate	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	50 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	208 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	100 ppm
	Short time value (Workplace exposure limit (EH40/2005))	416 mg/m³
p-Toluenesulphonyl chloride	Short time value (Workplace exposure limit (EH40/2005))	5 mg/m³
Rosin-based solder flux fume	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	0.05 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	0.15 mg/m³

USA (TLV-ACGIH)

Butylated hydroxytoluene	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	2 mg/m³ **(1)**
Methacrylic acid	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	20 ppm
Methyl methacrylate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	50 ppm
	Short time value (TLV - Adopted Value)	100 ppm
Resin acids, as total Resin acids	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	0.001 mg/m³ **(2)**

(1) (IFV): Inhalable fraction and vapor
(2) (I): Inhalable fraction

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Di-tert-butyl-p-cresol	OSHA	2108
Methacrylic Acid	OSHA	2005
Methyl ester of methacrylic acid	NIOSH	2537
Methyl Methacrylate	NIOSH	2537
Methyl Methacrylate	NIOSH	3900
Methyl Methacrylate	NON	36
Methyl Methacrylate	OSHA	94

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

methyl methacrylate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	348.4 mg/m³	
	Long-term local effects inhalation	208 mg/m³	
	Acute local effects inhalation	416 mg/m³	
	Long-term systemic effects dermal	13.67 mg/kg bw/day	
	Long-term local effects dermal	1.5 mg/cm²	
	Acute local effects dermal	1.5 mg/cm²	

maleic acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3 mg/m³	
	Acute systemic effects inhalation	3 mg/m³	
	Long-term local effects inhalation	3 mg/m³	
	Acute local effects inhalation	3 mg/m³	

methacrylic acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	39.3 mg/m³	
	Long-term local effects inhalation	44 mg/m³	
	Long-term systemic effects dermal	4.25 mg/kg bw/day	
	Long-term local effects dermal	0.38 mg/cm²	

2,6-di-tert-butyl-p-cresol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	1.76 mg/m³	
	Long-term systemic effects dermal	0.5 mg/kg bw/day	

α,α-dimethylbenzyl hydroperoxide

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	6 mg/m³	

tosyl chloride

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3.5 mg/m³	
	Long-term systemic effects dermal	0.5 mg/kg bw/day	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	16.2 mg/m³	
	Long-term systemic effects dermal	0.8 mg/kg bw/day	

DNEL/DMEL - General population

methyl methacrylate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	74.3 mg/m³	
	Long-term local effects inhalation	104 mg/m³	
	Acute local effects inhalation	208 mg/m³	
	Long-term systemic effects dermal	8.2 mg/kg bw/day	
	Long-term local effects dermal	1.5 mg/cm²	
	Acute local effects dermal	1.5 mg/cm²	
	Long-term systemic effects oral	8.2 mg/kg bw/day	

methacrylic acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	11.7 mg/m³	
	Long-term local effects inhalation	8.8 mg/m³	
	Long-term systemic effects dermal	5.35 mg/kg bw/day	
	Long-term local effects dermal	0.23 mg/m³	
	Long-term systemic effects oral	5.35 mg/kg bw/day	

2,6-di-tert-butyl-p-cresol

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.435 mg/m³	
	Long-term systemic effects dermal	0.25 mg/kg bw/day	
	Long-term systemic effects oral	0.25 mg/kg bw/day	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	4.9 mg/m³	
	Long-term systemic effects dermal	0.5 mg/kg bw/day	
	Long-term systemic effects oral	1.4 mg/kg bw/day	

PNEC

methyl methacrylate

Compartments	Value	Remark
Fresh water	0.94 mg/l	
Marine water	0.094 mg/l	
Fresh water (intermittent releases)	0.69 mg/l	
STP	10 mg/l	
Fresh water sediment	10.2 mg/kg sediment dw	
Marine water sediment	1.02 mg/kg sediment dw	
Soil	1.48 mg/kg soil dw	

maleic acid

Compartments	Value	Remark
Fresh water	0.1 mg/l	
Marine water	0.01 mg/l	
Fresh water (intermittent releases)	0.428 mg/l	
STP	44.6 mg/l	
Fresh water sediment	0.334 mg/kg sediment dw	
Marine water sediment	0.033 mg/kg sediment dw	
Soil	0.042 mg/kg soil dw	

methacrylic acid

Compartments	Value	Remark
Fresh water	0.82 mg/l	
Marine water	0.082 mg/l	
Fresh water (intermittent releases)	0.45 mg/l	
STP	100 mg/l	
Fresh water sediment	3.09 mg/kg sediment dw	
Marine water sediment	0.309 mg/kg sediment dw	
Soil	0.137 mg/kg soil dw	

2,6-di-tert-butyl-p-cresol

Compartments	Value	Remark
Fresh water	0.199 µg/l	
Fresh water (intermittent releases)	1.99 µg/l	
Marine water	0.02 µg/l	
STP	0.017 mg/l	
Fresh water sediment	0.458 mg/kg sediment dw	
Marine water sediment	0.046 mg/kg sediment dw	
Soil	0.054 mg/kg soil dw	
Oral	16.67 mg/kg food	

α,α-dimethylbenzyl hydroperoxide

Compartments	Value	Remark
Fresh water	0.003 mg/l	
Marine water	< 0.001 mg/l	
Fresh water (intermittent releases)	0.031 mg/l	
STP	0.35 mg/l	
Fresh water sediment	0.023 mg/kg sediment dw	
Marine water sediment	0.002 mg/kg sediment dw	
Soil	0.003 mg/kg soil dw	

tosyl chloride

Compartments	Value	Remark
Fresh water	0.1 mg/l	
Marine water	0.01 mg/l	
Fresh water (intermittent releases)	1 mg/l	
STP	17.3 mg/l	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Compartments	Value	Remark
Fresh water	0.002 mg/l	
Marine water	< 0.001 mg/l	
Fresh water (intermittent releases)	0.019 mg/l	
STP	10 mg/l	
Fresh water sediment	0.008 mg/kg sediment dw	
Marine water sediment	0.001 mg/kg sediment dw	
Soil	0.006 mg/kg soil dw	
Oral	5.6 mg/kg food	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges. Insufficient ventilation: keep naked flames/sparks away. Measure the concentration in the air regularly. Work under local exhaust/ventilation.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
butyl rubber	> 60 minutes	0.7 mm	Class 3	

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034). Head/neck protection.

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Liquid
Colour	Black
Odour	Characteristic odour
Odour threshold	No data available in the literature
Melting point	No data available in the literature
Boiling point	No data available in the literature

Flammability	Highly flammable liquid and vapour.
Explosion limits	No data available in the literature
Flash point	11 °C ; Closed cup
Auto-ignition temperature	No data available in the literature
Decomposition temperature	No data available in the literature
pH	No data available in the literature
Kinematic viscosity	≥ 40 mm²/s ; 40 °C
Dynamic viscosity	No data available in the literature
Solubility	Water ; insoluble
Log Kow	Not applicable (mixture)
Vapour pressure	No data available in the literature
Absolute density	1000 kg/m³ - 1030 kg/m³
Relative density	1.00 - 1.03
Relative vapour density	No data available in the literature
Particle size	Not applicable (liquid)

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

May polymerize: release of heat.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat. Insufficient ventilation: use spark-/explosionproof appliances and lighting system. Insufficient ventilation: take precautions against electrostatic charges. Insufficient ventilation: keep naked flames/sparks away.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Upon combustion: CO and CO2 are formed.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1 Test results

Acute toxicity

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		9400 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	Equivalent to OECD 402	> 5000 mg/kg bw	24 h	Rabbit (male)	Experimental value	
Inhalation (vapours)	LC50	Equivalent to OECD 403	29.8 mg/l air	4 h	Rat (male / female)	Experimental value	

maleic acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		708 mg/kg bw		Rat	Experimental value	
Skin	LD50		1560 mg/kg bw		Rabbit	Experimental value	
						Annex VI	Not classified

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

methacrylic acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	1320 mg/kg bw		Rat (male)	Experimental value	
Dermal	LD50		500 mg/kg bw - 1000 mg/kg bw		Rabbit	Experimental value	
Inhalation (mixture of vapour and aerosol)	LC50	Equivalent to OECD 403	7.1 mg/l air	4 h	Rat (male / female)	Experimental value	
Inhalation (dust)	LC50	Equivalent to OECD 403	3.19 mg/l - 6.5 mg/l	4 h	Rat (male / female)	Experimental value	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

colophony

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2000 mg/kg		Rat (female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation						Data waiving	

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 6000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation (vapours)	RD50		59.7 ppm	30 minutes	Mouse (male)	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		382 mg/kg		Rat (male)	Experimental value	
Dermal	LD50		134 mg/kg bw	24 h	Rabbit (male)	Weight of evidence	
Dermal			category 4			Annex VI	
Inhalation (vapours)	LC50		1.37 mg/l	4 h	Rat (male)	Experimental value	Converted value
Inhalation			category 3			Annex VI	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

tosyl chloride

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	Equivalent to OECD 401	4680 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50		> 5010 mg/kg bw	24 h	Rabbit (male / female)	Experimental value	
Inhalation						Data waiving	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	> 2000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50		> 13200 mg/kg bw		Rabbit	Experimental value	
Inhalation						Data waiving	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

MEGAPLAST MM A

No (test)data on the mixture available

Classification is based on the relevant ingredients

methyl methacrylate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating			24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Irritating		4 h	24; 72 hours	Rabbit	Experimental value	
Inhalation (vapours)	Irritating; STOT SE cat.3					Annex VI	

maleic acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	Equivalent to OECD 405		24; 48 hours	Rabbit	Experimental value	Single treatment
Eye	Highly irritating		2 minutes		Rabbit	Experimental value	
Eye	Irritating; category 2					Annex VI	
Not applicable (in vitro test)	Corrosive	OECD 435			Reconstructed human epidermis	Experimental value	
	Slightly irritating	OECD 404	24 h		Rabbit	Read-across	
Skin	Irritating; category 2					Annex VI	
Inhalation (dust)	Irritating; STOT SE cat.3					Annex VI	

Classification of this substance according to Annex VI is debatable as it does not correspond to the conclusion from the test

methacrylic acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage		4 seconds	24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Skin	Highly corrosive	Equivalent to OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

colophony

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment
Skin	Not irritating	OECD 404	4 h	24; 48; 72 hours	Rabbit	Experimental value	

2,6-di-tert-butyl-p-cresol

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Slightly irritating	Draize Test		24; 48; 72 hours	Rabbit	Experimental value	
Skin	Not irritating	Draize Test	24 h	24; 48 hours	Rabbit	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage			24 hours	Rabbit	Experimental value	Single treatment
Skin	Corrosive		24 h		Rabbit	Experimental value	

tosyl chloride

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Irritating	Equivalent to OECD 404	24 h	24; 48; 72 hours	Rabbit	Experimental value	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing

bis[2-(acryloyloxy)ethyl] hydrogen phosphate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Skin	Irritating; category 2					Literature study	

2-(phosphonooxy)ethyl acrylate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage; category 1					Literature study	
Skin	Irritating; category 2					Literature study	

Conclusion

Causes skin irritation.
Causes serious eye damage.
May cause respiratory irritation.

Respiratory or skin sensitisation

MEGAPLAST MM A

No (test)data on the mixture available
Classification is based on the relevant ingredients

methyl methacrylate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Sensitizing	Equivalent to OECD 429			Mouse	Experimental value	

maleic acid

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal	Sensitizing	OECD 406			Guinea pig (female)	Experimental value	
Dermal	Sensitizing	EU Method B.6		24; 48 hours	Guinea pig (female)	Experimental value	
Subcutaneous	Sensitizing	OECD 429	3 day(s)		Mouse (female)	Experimental value	

methacrylic acid

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Equivalent to OECD 406			Guinea pig (male)	Experimental value	

colophony

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Sensitizing	OECD 429			Mouse (female)	Experimental value	

2,6-di-tert-butyl-p-cresol

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Guinea pig maximisation test			Guinea pig (male / female)	Experimental value	
Skin	Not sensitizing				Human (male / female)	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin						Data waiving	

tosyl chloride

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Dermal (on the ears)	Sensitizing	OECD 429			Mouse (female)	Experimental value	

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	OECD 406	6 h	24; 48 hours	Guinea pig (female)	Experimental value	

bis[2-(acryloyloxy)ethyl] hydrogen phosphate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing; category 1B					Literature study	

2-(phosphonooxy)ethyl acrylate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing; category 1B					Literature study	

Conclusion

May cause an allergic skin reaction.
Not classified as sensitizing for inhalation

Specific target organ toxicity

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (drinking water)	NOAEL		≥ 124.1 mg/kg bw/day	No effect	104 week(s)	Rat (male)	Experimental value	
Oral (drinking water)	NOAEL		≥ 164 mg/kg bw/day	No effect	104 week(s)	Rat (female)	Experimental value	
Inhalation (vapours)	NOAEC systemic effects	Equivalent to OECD 453	1640 mg/m³ air	No adverse systemic effects	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)	NOAEC local effects	Equivalent to OECD 453	104 mg/m³ air	Nose (no effect)	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation (vapours)	LOAEC local effects	Equivalent to OECD 453	416 mg/m³ air	Nose (affection of the nasal septum)	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

maleic acid

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral	NOEL	Equivalent to OECD 409	60 mg/kg bw/day		90 day(s)	Dog (male / female)	Experimental value	
Oral	LOEL	Equivalent to OECD 452	250 mg/kg bw/day	All major organs (weight gain)	90 day(s)	Rat (male)	Weight of evidence	

methacrylic acid

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL		0.05 mg/kg bw/day	No effect	6 month(s)	Rat	Experimental value	
Inhalation	NOAEC	OECD 413	352 mg/m³	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Inhalation	LOAEC	Equivalent to OECD 453	1232 mg/m³ air	Central nervous system (no effect)	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

colophony

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL systemic effects	OECD 408	335 mg/kg bw/day - 401 mg/kg bw/day	No adverse systemic effects	90 day(s)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation							Data waiving	

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	Subacute toxicity test	≥ 61 mg/kg bw/day	No effect		Pig (male / female)	Experimental value	
Oral (diet)	NOAEL		25 mg/kg bw/day	No effect		Rat (male)	Experimental value	
Oral (diet)	Dose level		100 mg/kg bw/day	Liver (enlargement /affection of the liver)		Rat (male)	Experimental value	
Dermal	Dose level	Subchronic toxicity test	2000 mg/l	No adverse systemic effects	4 weeks (3 times / week)	Rat (male / female)	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	Dose level	Subchronic toxicity test	19 mg/kg	Mortality	7 weeks (3 times / week)	Rat (male)	Experimental value	
Inhalation (aerosol)	NOAEC	Subchronic toxicity test	31 mg/m³ air	No effect	13 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

tosyl chloride

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	LOAEL	OECD 422	150 mg/kg bw/day	Stomach (irritation of the gastric/intestinal mucosa)	34 day(s) - 51 day (s)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation							Data waiving	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster lung fibroblasts (V79)		Experimental value	

maleic acid

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Ames test	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster lung fibroblasts (V79)		Experimental value	

methacrylic acid

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster lung fibroblasts (V79)	No effect	Experimental value	

colophony

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes	No effect	Experimental value	

2,6-di-tert-butyl-p-cresol

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)	No effect	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Result	Method	Test substrate	Effect	Value determination	Remark
Positive	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	

tosyl chloride

Result	Method	Test substrate	Effect	Value determination	Remark
Positive with metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	

Mutagenicity (in vivo)

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	Equivalent to OECD 478	5 days (6h / day)	Mouse (male)	No effect	Experimental value	

2,6-di-tert-butyl-p-cresol

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	Micronucleus test		Mouse (male / female)	No effect	Experimental value	Single intraperitoneal injection
Positive (Oral (diet))	Chromosome aberration assay	10 weeks (daily)	Rat (male)		Experimental value	Not relevant

α,α-dimethylbenzyl hydroperoxide

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Dermal)	Micronucleus test	13 weeks (5 days / week)	Mouse (male / female)	Blood (no effect)	Experimental value	

tosyl chloride

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Intraperitoneal)	OECD 474	3 days (1x / day)	Mouse (male)	Bone marrow (no effect)	Experimental value	

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Equivalent to OECD 451	≥ 2.05 mg/l air	No carcinogenic effect	102 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 90.3 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (male)	Experimental value	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 193.8 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (female)	Experimental value	

maleic acid

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	Equivalent to OECD 451	≥ 100 mg/kg bw/day	No carcinogenic effect	104 weeks (7 days / week)	Rat (male / female)	Experimental value	

methacrylic acid

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation	NOAEC	Equivalent to OECD 451	≥ 2.05 mg/l air	No carcinogenic effect	102 weeks (6h / day, 5 days / week)	Rat (female)	Experimental value	
Inhalation	NOAEC	Equivalent to OECD 451	≥ 4.1 mg/l air	No carcinogenic effect	102 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 90.3 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (male)	Experimental value	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 193.8 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (female)	Experimental value	

colophony

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Unknown							Data waiving	

2,6-di-tert-butyl-p-cresol

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	Carcinogenic toxicity study	25 mg/kg bw/day	No carcinogenic effect		Rat (male / female)	Experimental value	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

MEGAPLAST MM A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

methyl methacrylate

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	OECD 414	8.44 mg/l air	10 days (6h / day)	Rat	Foetus (no effect)	Experimental value	
Maternal toxicity (Inhalation (vapours))	NOAEC	OECD 414	8.44 mg/l air	10 days (6h / day)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 416	400 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

maleic acid

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Effects on fertility (Oral (stomach tube))	LOEL	Equivalent to OECD 416	20 mg/kg bw/day	80 day(s)	Rat (male / female)	No effect	Read-across	

methacrylic acid

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	400 mg/kg bw/day		Rat	Foetus (no effect)	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL (P/F1)	OECD 416	400 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

colophony

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (diet))	NOAEL	OECD 414	5000 ppm	17 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (diet))	NOAEL	OECD 414	2500 ppm	17 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (diet))	NOAEL (P)	OECD 421	3000 ppm	30 day(s) - 45 day (s)	Rat (male / female)	No effect	Experimental value	

2,6-di-tert-butyl-p-cresol

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	800 mg/kg bw/day	7 days (gestation, daily)	Mouse	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	240 mg/kg bw/day	7 days (gestation, daily)	Mouse	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	LOAEL	Developmental toxicity study	800 mg/kg bw/day		Mouse	Maternal toxicity	Experimental value	
Effects on fertility (Oral (diet))	Dose level	Equivalent to OECD 416	250 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	

α,α-dimethylbenzyl hydroperoxide

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	≥ 100 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL systemic effects	OECD 414	100 mg/kg bw/day	14 days (gestation, daily)	Rat	No adverse systemic effects	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL local effects	OECD 414	15 mg/kg bw/day	14 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility							Data waiving	

tosyl chloride

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	> 3000 mg/kg bw/day	10 day(s)	Rat	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	Developmental toxicity study	> 3000 mg/kg bw/day	10 day(s)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	750 mg/kg bw/day	34 day(s) - 51 day (s)	Rat (male / female)	No effect	Experimental value	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

MEGAPLAST MM A

Judgement is based on the relevant ingredients
Not classified for aspiration toxicity

Toxicity other effects

MEGAPLAST MM A

No (test)data on the mixture available

Chronic effects from short and long-term exposure

MEGAPLAST MM A

Skin rash/inflammation.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

MEGAPLAST MM A

No (test)data on the mixture available
Classification is based on the relevant ingredients

methyl methacrylate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		> 100 mg/l		Pisces			Literature study
Acute toxicity crustacea	EC50	EPA OTS 797.1300	69 mg/l	48 h	Daphnia magna	Flow-through system	Fresh water	Experimental value; Locomotor effect
Toxicity algae and other aquatic plants	EC50	OECD 201	> 110 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOEC	OECD 201	110 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	37 mg/l	21 day(s)	Daphnia magna	Flow-through system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	Dose level	OECD 301C	100 mg/l	14 day(s)	Activated sludge	Static system	Fresh water	Experimental value
	EC50		> 178 mg/l	48 h	Chilomas sp.			Literature study

maleic acid

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	DIN 38412-15	106 mg/l	48 h	Leuciscus idus		Fresh water	Weight of evidence
Acute toxicity crustacea	EC50	OECD 202	42.81 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	OECD 201	74.35 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	EC10	OECD 201	11.8 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC		10 mg/l	21 day(s)	Daphnia magna		Fresh water	Read-across; Reproduction
Toxicity aquatic micro-organisms	EC10	DIN 38412-8	44.6 mg/l	18 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Growth inhibition

methacrylic acid

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EPA OTS 797.1400	85 mg/l	96 h	Oncorhynchus mykiss	Flow-through system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	EPA OTS 797.1300	> 130 mg/l	48 h	Daphnia magna	Flow-through system	Fresh water	Experimental value; Lethal
Toxicity algae and other aquatic plants	ErC50	OECD 201	45 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	8.2 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	OECD 210	10 mg/l	35 day(s)	Danio rerio	Flow-through system	Fresh water	Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	≥ 53 mg/l	21 day(s)	Daphnia magna	Flow-through system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms	EC50	DIN 38412-8	270 mg/l	17 h	Pseudomonas putida	Static system	Fresh water	Experimental value; Neutralized

colophony

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1.7 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EL50	OECD 202	36 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Similar product
Toxicity algae and other aquatic plants	EC50	OECD 201	40 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	OECD 201	6.3 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Toxicity aquatic micro-organisms	EC50	OECD 209	> 10000 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; GLP

2,6-di-tert-butyl-p-cresol

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	ECOSAR v1.00	0.199 mg/l	96 h	Pisces			QSAR; Lethal
Acute toxicity crustacea	EC50	OECD 202	0.48 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	OECD 201	> 0.24 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	NOEC	OECD 201	0.24 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish	NOEC	OECD 210	0.053 mg/l	30 day(s)	Oryzias latipes			Experimental value; GLP
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.069 mg/l	21 day(s)	Daphnia magna		Fresh water	Experimental value; GLP

Classification of this substance is debatable as it does not correspond to the conclusion from the test

α,α-dimethylbenzyl hydroperoxide

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	3.9 mg/l	96 h	Oncorhynchus mykiss	Semi-static system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	19 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	3.1 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	1 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; GLP

tosyl chloride

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h	Oryzias latipes	Static system	Fresh water	Experimental value; Neutralized
Acute toxicity crustacea	EC50	OECD 202	> 334 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; Neutralized
Toxicity algae and other aquatic plants	ErC50	EPA OPPTS 850.5400	> 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	EPA OPPTS 850.5400	2.6 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Toxicity aquatic micro-organisms	EC10	Equivalent to OECD 209	240 mg/l	3 h	Activated sludge	Static system	Fresh water	Read-across; Respiration

propylidynetrimethanol, ethoxylated, esters with acrylic acid

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1.95 mg/l	96 h	Danio rerio	Static system	Fresh water	Experimental value; Nominal concentration

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

methyl methacrylate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C	94 %; Oxygen consumption	14 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	7 h	1.5E6 /cm³	QSAR

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
	53 month(s); pH = 7		Experimental value

maleic acid

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	97.08 %; GLP	28 day(s)	Experimental value

methacrylic acid

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	86 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	21 h	5E5 /cm³	Calculated value

colophony

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	89 %; GLP	28 day(s)	Experimental value

2,6-di-tert-butyl-p-cresol

Biodegradation water

Method	Value	Duration	Value determination
	4.7 %	28 day(s)	Experimental value

α,α-dimethylbenzyl hydroperoxide

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	3 %; GLP	28 day(s)	Experimental value

tosyl chloride

Biodegradation water

Method	Value	Duration	Value determination
OECD 301D	60 %; Oxygen consumption	28 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111	2.2 minutes; pH = 7	Primary degradation	Experimental value

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Biodegradation water

Method	Value	Duration	Value determination
OECD 301B	61 %; GLP	28 day(s)	Experimental value

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

MEGAPLAST MM A

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

methyl methacrylate

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		1.4	20 °C	Experimental value

maleic acid

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		-1.3	20 °C	Experimental value

methacrylic acid

Log Kow

Method	Remark	Value	Temperature	Value determination
		0.93	22 °C	Experimental value

colophony

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		23 - 129	30 day(s)	Oncorhynchus mykiss	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		1.9 - 6.0		Experimental value

2,6-di-tert-butyl-p-cresol

Log Kow

Method	Remark	Value	Temperature	Value determination
		5.1		

α,α-dimethylbenzyl hydroperoxide

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		1.6	25 °C	Experimental value

tosyl chloride

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not quantifiable			

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		2.89	23 °C	Experimental value

bis[2-(acryloyloxy)ethyl] hydrogen phosphate

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		0.12		Estimated value

2-(phosphonooxy)ethyl acrylate

Log Kow

Method	Remark	Value	Temperature	Value determination
KOWWIN		-0.33		Estimated value

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

methyl methacrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	EPA OTS 796.2750	0.94 - 1.9	Experimental value

maleic acid

(log) Koc

Parameter	Method	Value	Value determination
log Koc		1.63	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level I	0 %	0 %	0 %	0 %	100 %	Calculated value

methacrylic acid

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.35 - 0.67	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	0.0050 %		0.18 %	0.012 %	99.8 %	Calculated value

colophony

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.9	QSAR

2,6-di-tert-butyl-p-cresol

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v1.66	4.4	Calculated value

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Mackay level III	0.37 %		30.4 %	58.5 %	10.7 %	Calculated value

α,α-dimethylbenzyl hydroperoxide

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	1.6	Experimental value

tosyl chloride

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.9	Calculated value

propylidynetrimethanol, ethoxylated, esters with acrylic acid

(log) Koc

Parameter	Method	Value	Value determination
log Koc	OECD 121	2.22	Experimental value

bis[2-(acryloyloxy)ethyl] hydrogen phosphate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.964 - 1.156	Calculated value

2-(phosphonooxy)ethyl acrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.780 - 1.000	Calculated value

Conclusion

Contains component(s) with potential for mobility in the soil
Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

MEGAPLAST MM A

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Groundwater

Groundwater pollutant

methyl methacrylate

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

maleic acid

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

Water ecotoxicity pH

pH shift

methacrylic acid

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

Water ecotoxicity pH

pH shift

colophony

Groundwater

Groundwater pollutant

tosyl chloride

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

Groundwater

Groundwater pollutant

propylidynetrimethanol, ethoxylated, esters with acrylic acid

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 2024/573)

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.
Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).
08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment. Dispose of at authorized waste collection point. Contains no organic halogen which may add to the AOX value.

13.1.3 Packaging/Container

European Union

Waste material code packaging (Directive 2008/98/EC).
15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1. UN number or ID number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	adhesives

14.3. Transport hazard class(es)

Hazard identification number	
Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of ADR

Rail (RID)

14.1. UN number or ID number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	adhesives

14.3. Transport hazard class(es)

Hazard identification number	33
Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of RID

Inland waterways (ADN)

14.1. UN number or ID number

UN number/ID number	1133

14.2. UN proper shipping name

Proper shipping name	adhesives

14.3. Transport hazard class(es)

Class	3
Classification code	F1

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.2.3.1.4 of ADN

Sea (IMDG/IMSBC)

14.1. UN number or ID number

UN number	1133

14.2. UN proper shipping name

Proper shipping name	adhesives

14.3. Transport hazard class(es)

Class	3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Marine pollutant	-
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	223
Special provisions	955
Limited quantities	Combination packagings: not more than 5 liters per inner packaging for liquids. A package shall not weigh more than 30 kg (gross mass).
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 2.3.2.2 of IMDG

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable, based on available data

Air (ICAO-TI/IATA-DGR)

14.1. UN number or ID number

UN number/ID number	1133

14.2. UN proper shipping name

Proper shipping name	adhesives

14.3. Transport hazard class(es)

Class	3

14.4. Packing group

Packing group	III
Labels	3

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	A3
Specific mention	Viscous liquid with a flash point lower than 23°C, which meets the conditions indicated in 3.3.3.1 of ICAO

Passenger and cargo transport

Limited quantities: maximum net quantity per packaging	10 L

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
50 % - 80 %	
508 g/l - 812 g/l	

Directive 2012/18/EU (Seveso III)

Threshold values under special circumstances

Substance or category	Special circumstances	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P5b FLAMMABLE LIQUIDS	Particular processing conditions, such as high pressure or high temperature, may create major-accident hazards	50	200	None	Flammability
P5a FLAMMABLE LIQUIDS	Maintained at a temperature above the boiling point	10	50	None	Flammability

Threshold values under normal circumstances

Substance or category	Low tier (tonnes)	Top tier (tonnes)	Group	For this substance or mixture the summation rule has to be applied for:
P5c FLAMMABLE LIQUIDS	5000	50000	None	Flammability

REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

	Designation of the substance, of the group of substances or of the mixture	Conditions of restriction
· methyl methacrylate · methacrylic acid · α,α-dimethylbenzyl hydroperoxide · propylidynetrimethanol, ethoxylated, esters with acrylic acid	Liquid substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects, 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with H304, 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: “Keep lamps filled with this liquid out of the reach of children”; and, by 1 December 2010, “Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life- threatening lung damage”; b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: “Just a sip of grill lighter may lead to life threatening lung damage”; c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.
· methyl methacrylate	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not.	1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — “whoopee” cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: “For professional users only”. 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated.
· methyl methacrylate · maleic acid · methacrylic acid · colophony · α,α-dimethylbenzyl hydroperoxide	Substances falling within one or more of the following points: (a) substances classified as any of the following in Part 3 of Annex VI to Regulation (EC) No 1272/2008: — carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, but excluding any such substances classified due to effects only following	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

	exposure by inhalation — reproductive toxicant category 1A, 1B or 2 but excluding any such substances classified due to effects only following exposure by inhalation — skin sensitiser category 1, 1A or 1B — skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2 — serious eye damage category 1 or eye irritant category 2 (b) substances listed in Annex II to Regulation (EC) No 1223/2009 of the European Parliament and of the Council (c) substances listed in Annex IV to Regulation (EC) No 1223/2009 for which a condition is specified in at least one of the columns g, h and i of the table in that Annex (d) substances listed in Appendix 13 to this Annex. The ancillary requirements in paragraphs 7 and 8 of column 2 of this entry apply to all mixtures for use for tattooing purposes, whether or not they contain a substance falling within points (a) to (d) of this column of this entry.	

National legislation Belgium

MEGAPLAST MM A

No data available

National legislation The Netherlands

MEGAPLAST MM A

Waterbezwaarlijkheid	A (3); Algemene Beoordelingsmethodiek (ABM)

National legislation France

MEGAPLAST MM A

No data available

National legislation Germany

MEGAPLAST MM A

Lagerklasse (TRGS510)	3: Entzündbare Flüssigkeiten
WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

methyl methacrylate

TA-Luft	5.2.5
TRGS900 - Risiko der Fruchtschädigung	Methyl-methacrylat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

maleic acid

TA-Luft	5.2.1

methacrylic acid

TA-Luft	5.2.5/I
TRGS900 - Risiko der Fruchtschädigung	Methacrylsäure; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

colophony

TA-Luft	5.2.1

2,6-di-tert-butyl-p-cresol

TA-Luft	5.2.5/I
TRGS900 - Risiko der Fruchtschädigung	2,6-Di-tert-butyl-p-kresol; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden

α,α-dimethylbenzyl hydroperoxide

TA-Luft	5.2.5

tosyl chloride

TA-Luft	5.2.1

propylidynetrimethanol, ethoxylated, esters with acrylic acid

TA-Luft	5.2.5

bis[2-(acryloyloxy)ethyl] hydrogen phosphate

TA-Luft	5.2.1

2-(phosphonooxy)ethyl acrylate

TA-Luft	5.2.1

National legislation Austria

MEGAPLAST MM A

No data available

methyl methacrylate

Gefahr der Sensibilisierung der Haut	Methylmethacrylat; Sh

National legislation United Kingdom

MEGAPLAST MM A

No data available

colophony

Skin Sensitisation	Rosin-based solder flux fume; Sen
Respiratory sensitisation	Rosin-based solder flux fume; Sen

Other relevant data

MEGAPLAST MM A

No data available

methyl methacrylate

TLV - Skin Sensitisation	Methyl methacrylate; SEN; Sensitization
TLV - Carcinogen	Methyl methacrylate; A4
IARC - classification	3; Methyl methacrylate

colophony

TLV - Skin Sensitisation	Resin acids, as total Resin acids; SEN; Sensitization
TLV - Respiratory Sensitisation	Resin acids, as total Resin acids; SEN; Sensitization

2,6-di-tert-butyl-p-cresol

IARC - classification	3; Butylated hydroxytoluene (bht)
TLV - Carcinogen	Butylated hydroxytoluene; A4

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H225 Highly flammable liquid and vapour.
H242 Heating may cause a fire.
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H311 Toxic in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.
H373 May cause damage to organs (lungs) through prolonged or repeated exposure if inhaled.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does

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