SAFETY DATA SHEET

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

MEGAPLAST PPE, B

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

1.1. Product identifier

Product name : MEGAPLAST PPE, B
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

Adhesive: component
Hardener

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
Repr.	category 1B	H360D: May damage the unborn child.
Skin Sens.	category 1	H317: May cause an allergic skin reaction.
Eye Dam.	category 1	H318: Causes serious eye damage.
Aquatic Chronic	category 3	H412: Harmful to aquatic life with long lasting effects.

2.2. Label elements

Contains: tetrahydrofurfuryl methacrylate; 2-ethylhexyl methacrylate; [2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate; succinic anhydride; methyl methacrylate; nickel diformate.

Signal word Danger

H-statements

H360D May damage the unborn child.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.
P273 Avoid release to the environment.

P321	Specific treatment (see information on this label).
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.

2.3. Other hazards

Caution! Substance is absorbed through the skin
Warning! Product may cause floors to be slippery

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
tetrahydrofurfuryl methacrylate	2455-24-5 219-529-5	40% <C<50%	Repr. 1B; H360D Skin Sens. 1; H317 Aquatic Chronic 3; H412	(1)(10)	Constituent	
2-ethylhexyl methacrylate	688-84-6 211-708-6	C<20%	Skin Sens. 1B; H317 Aquatic Chronic 3; H412 STOT SE 3; H335: C≥10%, (CLP Annex VI (ATP 0))	(1)(10)(6)	Constituent	
[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate	20882-04-6 244-096-4	3%<C<7%	Skin Sens. 1; H317 Eye Dam. 1; H318	(1)(10)	Constituent	
succinic anhydride 01-2119485841-30	108-30-5 203-570-0	C<1%	Resp. Sens. 1; H334 Skin Sens. 1; H317 Acute Tox. 4; H302 Skin Corr. 1; H314 Eye Dam. 1; H318 EUH071	(1)(10)	Constituent	
methyl methacrylate 01-2119452498-28	80-62-6 201-297-1	C<0.2%	Flam. Liq. 2; H225 Skin Sens. 1; H317 Skin Irrit. 2; H315 STOT SE 3; H335	(1)(2)(10)	Constituent	
styrene 01-2119457861-32	100-42-5 202-851-5	C<0.2%	Flam. Liq. 3; H226 Repr. 2; H361d STOT RE 1; H372 Acute Tox. 4; H332 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 Aquatic Chronic 3; H412	(1)(2)(6)(10)	Constituent	
nickel diformate	3349-06-2 222-101-0	C<0.2%	Carc. 1A; H350i Muta. 2; H341 Repr. 1B; H360D*** STOT RE 1; H372 Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 STOT RE 1; H372: C≥1%, (CLP Annex VI (ATP 1)) STOT RE 2; H373: 0,1%≤C<1%, (CLP Annex VI (ATP 1)) Skin Sens. 1; H317: C≥0.01%, (CLP Annex VI (ATP 1))	(1)(2)(10)	Constituent	M: 1 (Acute, CLP Annex VI (ATP 1)) M: 1 (Chronic, CLP Annex VI (ATP 1))

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit
(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data
(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:
No effects known.

After skin contact:
No effects known.

After eye contact:
Corrosion of the eye tissue.

After ingestion:
No effects known.

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:
Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it. Heat exposure: dilute toxic gas/vapour with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:
Gloves (EN 374). Face shield (EN 166). 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

No naked flames. Large spills/in confined spaces: consider evacuation. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. 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). Face shield (EN 166). 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. 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. Damaged/cooled tanks must be emptied. 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. 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:

Storage temperature: < 25 °C. Meet the legal requirements. Store in a cool area. Keep container in a well-ventilated place. Provide for a tub to collect spills. Keep out of direct sunlight. Keep only in the original container.

7.2.2 Keep away from:

Heat sources, oxidizing agents, (strong) acids, (strong) bases.

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
Nickel compounds *shall apply from 2025-01-18*	Time-weighted average exposure limit 8 h (Limit value for occupational exposure)	0.01 mg/m³ **(1)**
	Time-weighted average exposure limit 8 h (Limit value for occupational exposure)	0.05 mg/m³ **(2)**
Nickel compounds *shall apply until 2025-01-17*	Time-weighted average exposure limit 8 h (Limit value for occupational exposure)	0.1 mg/m³ **(2)**

(1) (2): Respirable fraction
(2) (1): Inhalable fraction

Belgium

Composés du nickel, (mesurée en tant que Ni) *shall apply from 2025-01-18*	Time-weighted average exposure limit 8 h	0.01 mg/m³ **(1)**
	Time-weighted average exposure limit 8 h	0.05 mg/m³ **(2)**
Composés du nickel, (mesurée en tant que Ni) *shall apply until 2025-01-17*	Time-weighted average exposure limit 8 h	0.1 mg/m³ **(2)**
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
Styrène (monomère)	Time-weighted average exposure limit 8 h	25 ppm
	Time-weighted average exposure limit 8 h	108 mg/m³
	Short time value	50 ppm
	Short time value	216 mg/m³

(1) Fraction alvéolaire
(2) fraction inhalable

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

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
Styrène	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	23.3 ppm
	Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative)	100 mg/m³
	Short time value (VRI: Valeur réglementaire indicative)	46.6 ppm
	Short time value (VRI: Valeur réglementaire indicative)	200 mg/m³
	Ces valeurs sont assortie de la mention "bruit" indiquant la possibilité d'une atteinte auditive en cas de co-exposition au bruit.	

Germany

Methyl-methacrylat	Time-weighted average exposure limit 8 h (TRGS 900)	210 mg/m³ **(1)**
	Time-weighted average exposure limit 8 h (TRGS 900)	50 ppm **(1)**
Nickel und Nickelverbindungen	Time-weighted average exposure limit 8 h (TRGS 900)	0.030 mg/m³ **(2)**
	Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.	
	Die arbeitsmedizinisch-toxikologische Ableitung des Wertesbasiert auf einer Plausibilitätsbetrachtung. Auf die Werte für den A-Staub für Nickelmetall in dieser TRGS und für Nickelverbindungen in der TRGS 910 wird hingewiesen.	
	Für als Carc 1A oder 1B eingestufte Nickelverbindungen siehe TRGS 910 und TRGS 561. Eine Beurteilung anhand des AGW für Nickelmetall kann dann erfolgen, wenn ausschließlich Nickelmetall vorliegt. Sofern bei Tätigkeiten nickelhaltige Stäube entstehen, bei denen nur eine Oberflächenoxidation zu unterstellen ist,sind diese wie nickelmetallhaltige Gemische zu behandeln. Bei Anwendung von thermischen Verfahren in Gegenwart von Luftsauerstoff ist grundsätzlich eine Bildung von oxidischen Nickelverbindungen anzunehmen. Dies ist beispielsweise beim Schweißen (Elektroden oder Draht) und thermischen Schneiden mit bzw. von Legierungen, beim Metallspritzen von Legierungen, beim Schmelzen und Gießen von Legierungen und beim Schleifen und Trennen von Legierungen mit „Funkenbildung“ der Fall. Weitere Empfehlungen sowie Beispiele für Arbeitsverfahren, bei denen der AGW bzw. die ERB zur Beurteilung herangezogen werden können, enthält die IFA-Arbeitsmappe (Kennzahl 0537).	
	Der Arbeitsplatzgrenzwert bezieht sich auf den Elementgehalt des entsprechenden Metalls.	
	Die arbeitsmedizinisch-toxikologische Ableitung des Wertesbasiert auf einer Plausibilitätsbetrachtung. Auf die Werte für den A-Staub für Nickelmetall in dieser TRGS und für Nickelverbindungen in der TRGS 910 wird hingewiesen.	
	Für als Carc 1A oder 1B eingestufte Nickelverbindungen siehe TRGS 910 und TRGS 561. Eine Beurteilung anhand des AGW für Nickelmetall kann dann erfolgen, wenn ausschließlich Nickelmetall vorliegt. Sofern bei Tätigkeiten nickelhaltige Stäube entstehen, bei denen nur eine Oberflächenoxidation zu unterstellen ist,sind diese wie nickelmetallhaltige Gemische zu behandeln. Bei Anwendung von thermischen Verfahren in Gegenwart von Luftsauerstoff ist grundsätzlich eine Bildung von oxidischen Nickelverbindungen anzunehmen. Dies ist beispielsweise beim Schweißen (Elektroden oder Draht) und thermischen Schneiden mit bzw. von Legierungen, beim Metallspritzen von Legierungen, beim Schmelzen und Gießen von Legierungen und beim Schleifen und Trennen von Legierungen mit „Funkenbildung“ der Fall. Weitere Empfehlungen sowie Beispiele für Arbeitsverfahren, bei denen der AGW bzw. die ERB zur Beurteilung herangezogen werden können, enthält die IFA-Arbeitsmappe (Kennzahl 0537).	
Nickelverbindungen, als Carc. 1A, Carc. 1B eingestuft	*Die Konzentrationen beziehen sich auf den Elementgehalt des entsprechenden Metalls*	
	Die Toleranzkonzentration wurde gemäß Nummer 3.2.1 aufgrund einer nicht krebserzeugenden Wirkung festgelegt. Bei Überschreitung gelten die glechen Maßnahmen wie bei Überschreitung des AGW.	
	Für Nickelmetall ist ein AGW in der E- und A-Staubfraktion und für Nickelverbindungen ist ein AGW in der E-Staubfraktion festgelegt, siehe hierzu TRGS 900.	
Styrol	Time-weighted average exposure limit 8 h (TRGS 900)	20 ppm **(3)**
	Time-weighted average exposure limit 8 h (TRGS 900)	86 mg/m³ **(3)**
Tetrahydrofurfurylmethacrylat	*Der Stoff kann gleichzeitig als Dampf und Aerosol vorliegen.*	

(1) UF: 2 (I)
(2) Einatembare Fraktion; UF: 8 (II)
(3) UF: 2 (II)

Austria

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
Nickel (Stäube von Nickelmetall, Nickelsulfid und sulfidischen Erzen, Nickeloxide, Nickelchromat und Nickel- carbonat) und Stäube von Nickelverbindungen und Nickellegierungen	Kurzzeitwert 15(Miw) 4x (TRK)	2 mg/m³ **(1)**
	Tagesmittelwert (TRK)	0.5 mg/m³ **(1)**
Styrol	Tagesmittelwert (MAK)	20 ppm
	Tagesmittelwert (MAK)	85 mg/m³
	Kurzzeitwert 15(Miw) 4x (MAK)	80 ppm
	Kurzzeitwert 15(Miw) 4x (MAK)	340 mg/m³

(1) Einatembare Fraktion; als Ni berechnet

UK

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
Styrene	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	100 ppm
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	430 mg/m³
	Short time value (Workplace exposure limit (EH40/2005))	250 ppm
	Short time value (Workplace exposure limit (EH40/2005))	1080 mg/m³

USA (TLV-ACGIH)

Methyl methacrylate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	50 ppm
	Short time value (TLV - Adopted Value)	100 ppm
Styrene	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	10 ppm
	Short time value (TLV - Adopted Value)	20 ppm
	Ototoxicant	

b) National biological limit values

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

Germany

Styrol (Mandelsäure plus Phenylglyoxylsäure)	Urin: bei langzeitexposition: am schichtende nach mehreren vorangegangenen schichten expositionsende, bzw. schichtende	600 mg/g Kreatinin	

USA (BEI-ACGIH)

Styrene (Mandelic acid plus phenylglyoxylic acid)	Urine: end of shift	150 mg/g creatinine	Nonspecific
Styrene (Styrene)	Urine: end of shift	20 µg/L	

c) National acceptable and tolerable concentrations

Germany

Nickelverbindungen, als Carc. 1A, Carc. 1B eingestuft	Akzeptanzkonzentration (TRGS 910)	6 µg/m³
	Toleranzkonzentration (Risiko 4:1.000) (TRGS 910)	6 µg/m³

8.1.2 Sampling methods

Product name	Test	Number
Methyl ester of methacrylic acid	NIOSH	2537
Methyl Methacrylate	NIOSH	2537
Methyl Methacrylate	NIOSH	3900
Methyl Methacrylate	NON	36
Methyl Methacrylate	OSHA	94
Nickel	OSHA	ID 121
Nickel	OSHA	ID 125G
Styrene (Diffusive Samplers)	OSHA	1014
Styrene (organic and inorganic gases by Extractive FTIR)	NIOSH	3800
Styrene (Phenylethylene) (Hydrocarbons, aromatic)	NIOSH	1501

Product name	Test	Number
Styrene	NON	37
Styrene	OSHA	89

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

tetrahydrofurfuryl methacrylate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	3.53 mg/m³	
	Long-term systemic effects dermal	1 mg/kg bw/day	

2-ethylhexyl methacrylate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	2.5 mg/m³	
	Long-term systemic effects dermal	5 mg/kg bw/day	

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	

styrene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	85 mg/m³	
	Acute systemic effects inhalation	289 mg/m³	
	Acute local effects inhalation	306 mg/m³	
	Long-term systemic effects dermal	406 mg/kg bw/day	

DNEL/DMEL - General population

tetrahydrofurfuryl methacrylate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	0.87 mg/m³	
	Long-term systemic effects dermal	0.5 mg/kg bw/day	
	Long-term systemic effects oral	0.5 mg/kg bw/day	

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	

styrene

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	10.2 mg/m³	
	Acute systemic effects inhalation	174.25 mg/m³	
	Acute local effects inhalation	182.75 mg/m³	
	Long-term systemic effects dermal	343 mg/kg bw/day	
	Long-term systemic effects oral	2.1 mg/kg bw/day	

PNEC

tetrahydrofurfuryl methacrylate

Compartments	Value	Remark
Fresh water	0.347 mg/l	
Marine water	0.035 mg/l	
Fresh water (intermittent releases)	0.347 mg/l	
Marine water (intermittent releases)	0.035 mg/l	
STP	15.8 mg/l	
Fresh water sediment	2.12 mg/kg sediment dw	
Marine water sediment	0.212 mg/kg sediment dw	
Soil	0.221 mg/kg soil dw	

2-ethylhexyl methacrylate

Compartments	Value	Remark
Fresh water	0.003 mg/l	
Marine water	< 0.001 mg/l	
Fresh water (intermittent releases)	0.022 mg/l	
STP	10 mg/l	
Fresh water sediment	2.24 mg/kg sediment dw	
Marine water sediment	0.224 mg/kg sediment dw	
Soil	0.446 mg/kg soil dw	

succinic anhydride

Compartments	Value	Remark
Fresh water	0.085 mg/l	
Marine water	0.009 mg/l	
Fresh water (intermittent releases)	0.85 mg/l	
Marine water (intermittent releases)	0.085 mg/l	
STP	2.5 mg/l	
Fresh water sediment	1.959 mg/kg sediment dw	
Marine water sediment	0.196 mg/kg sediment dw	
Soil	0.342 mg/kg soil dw	

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	

styrene

Compartments	Value	Remark
Fresh water	0.028 mg/l	
Marine water	0.014 mg/l	
Fresh water (intermittent releases)	0.04 mg/l	
STP	5 mg/l	
Fresh water sediment	0.614 mg/kg sediment dw	
Marine water sediment	0.307 mg/kg sediment dw	
Soil	0.2 mg/kg soil dw	

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. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

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:

High gas/vapour concentration: full face mask with filter type A.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.4 mm	Class 6	

c) Eye protection:

Face shield (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

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
Viscosity	Viscous
Colour	Brown
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	Not classified as flammable
Explosion limits	No data available in the literature
Flash point	No data available in the literature
Auto-ignition temperature	No data available in the literature
Decomposition temperature	No data available in the literature
pH	Not applicable (non-soluble in water)
Kinematic viscosity	17.708 mm²/s
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	960 kg/m³ - 1100 kg/m³
Relative density	0.96 - 1.10
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

Heating increases the fire hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Keep away from naked flames/heat.

10.5. Incompatible materials

Oxidizing agents, (strong) acids, (strong) bases.

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 PPE, B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

tetrahydrofurfuryl methacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	4000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation						Data waiving	

2-ethylhexyl methacrylate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD0	OECD 401	> 2000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50		> 17620 mg/kg bw		Guinea pig	Experimental value	
Inhalation	LC0		> 14 ppm	6 h	Rat	Experimental value	

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2000 mg/kg bw		Rat (female)	Experimental value	

succinic anhydride

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 401	1795 mg/kg bw		Rat (male / female)	Experimental value	
Dermal	LD50	OECD 402	> 2000 mg/kg bw	24 h	Rat (male / female)	Experimental value	
Inhalation						Data waiving	

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	

styrene

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		> 5000 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)	LC50		11.8 mg/l air	4 h	Rat	Experimental value	

Conclusion

Not classified for acute toxicity

Corrosion/irritation

MEGAPLAST PPE, B

No (test)data on the mixture available

Classification is based on the relevant ingredients

tetrahydrofurfuryl methacrylate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	Equivalent to OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment without rinsing
Skin	Not irritating	Draize Test	24 h	24; 48; 72 hours	Rabbit	Experimental value	

2-ethylhexyl 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
Not applicable (in vitro test)	Not irritating	OECD 439	15 minutes		Reconstructed human epidermis	Experimental value	

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Not applicable (in vitro test)	Serious eye damage	OECD 437	10 minutes		Bovine eye (in vitro)	Experimental value	
Not applicable (in vitro test)	Not irritating	OECD 439	15 minutes		Reconstructed human epidermis	Experimental value	

succinic anhydride

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Single treatment with rinsing
Not applicable (in vitro test)	Corrosive	OECD 431	3 minutes - 60 minutes	42 hours	Reconstructed human epidermis	Experimental value	

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	

styrene

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating; category 2					Annex VI	
Skin	Irritating; category 2					Annex VI	
Inhalation (vapours)	Irritating; STOT SE cat.3					Literature study	

Conclusion

Causes serious eye damage.
Not classified as irritating to the respiratory system
Not classified as irritating to the skin

Respiratory or skin sensitisation

MEGAPLAST PPE, B

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

tetrahydrofurfuryl methacrylate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Not applicable (in vitro test)	Sensitizing					Experimental value	

2-ethylhexyl methacrylate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing	Guinea pig maximisation test			Guinea pig (female)	Experimental value	

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Sensitizing					Expert judgement	Based on impurity

succinic anhydride

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	
Inhalation (aerosol)	Sensitizing		6 h		Rat (male / female)	Experimental value of similar product	

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	

styrene

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	Guinea pig maximisation test			Guinea pig	Experimental value	

Conclusion

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

Specific target organ toxicity

MEGAPLAST PPE, B

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

tetrahydrofurfuryl methacrylate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 422	300 mg/kg bw/day	No effect	≥ 29 day(s)	Rat (male / female)	Experimental value	

2-ethylhexyl methacrylate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	120 mg/kg bw/day	No effect	91 day(s)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation	Dose level	Subacute toxicity test	60 ppm	No effect	3 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	

succinic anhydride

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	Equivalent to OECD 408	100 mg/kg bw/day	No effect	13 weeks (5 days / week)	Rat (male / female)	Experimental value	
Oral (stomach tube)	LOAEL	Equivalent to OECD 408	200 mg/kg bw/day	Mortality; body weight; food consumption	13 weeks (5 days / week)	Rat (male / female)	Experimental value	
Dermal							Data waiving	
Inhalation							Data waiving	

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	

styrene

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL		1000 mg/kg bw/day	No effect	78 week(s) - 103 week(s)	Rat (male / female)	Experimental value	
Inhalation (vapours)	NOAEC	Subchronic toxicity test	0.85 mg/l	Hearing organs (no effect)	13 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value	
Inhalation (vapours)	LOAEC	Subchronic toxicity test	3.41 mg/l	Hearing organs (histopathological changes)	13 weeks (6h / day, 5 days / week)	Rat (male)	Experimental value	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

MEGAPLAST PPE, B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

tetrahydrofurfuryl methacrylate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	

2-ethylhexyl methacrylate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 473	Human lymphocytes		Experimental value	
Negative with metabolic activation, negative without metabolic activation	OECD 476	Chinese hamster lung fibroblasts (V79)		Experimental value	

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

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

succinic anhydride

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 473	Chinese hamster ovary (CHO)		Experimental value	

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	

styrene

Result	Method	Test substrate	Effect	Value determination	Remark
Limited positive test result	Equivalent to OECD 471	Bacteria (S.typhimurium)		Experimental value	
Positive without metabolic activation	Equivalent to OECD 473	Human lymphocytes		Experimental value	

Mutagenicity (in vivo)

MEGAPLAST PPE, B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

2-ethylhexyl methacrylate

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
					Data waiving	

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	

styrene

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (vapours))	OECD 474	1 days (6h / day) - 21 days (6h / day)	Mouse (male)	No effect	Experimental value	

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

MEGAPLAST PPE, B

No (test)data on the mixture available

Judgement is based on the relevant ingredients

2-ethylhexyl methacrylate

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 (male)	Read-across	
Inhalation	NOAEC	Equivalent to OECD 451	≥ 4.1 mg/l air	No carcinogenic effect	102 weeks (6h / day, 5 days / week)	Rat (female)	Read-across	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 90.3 mg/kg bw/day	No carcinogenic effect	104 week(s)	Rat (male / female)	Read-across	
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	≥ 193.8 mg/kg bw/day	No carcinogenic effect	104 week(s)	Rat (male / female)	Read-across	

succinic anhydride

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	Equivalent to OECD 453	> 100 mg/kg bw/day	No carcinogenic effect	2 year(s)	Rat (male / female)	Experimental value	

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	

styrene

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Inhalation (vapours)	NOAEC	Equivalent to OECD 453	≥ 4.34 mg/l air	No carcinogenic effect	104 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value	
Oral (stomach tube)	NOAEL	Carcinogenic toxicity study	≥ 2000 mg/kg bw/day	No effect	78 weeks (5 days / week) - 103 weeks (5 days / week)	Rat (male / female)	Experimental value	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

MEGAPLAST PPE, B

No (test)data on the mixture available

Classification is based on the relevant ingredients

tetrahydrofurfuryl methacrylate

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 422	120 mg/kg bw/day	≥ 29 days (gestation, daily)	Rat (female)	No effect	Experimental value	
Developmental toxicity (Oral (stomach tube))	Dose level (P)	OECD 422	300 mg/kg bw/day	≥ 29 days (gestation, daily)	Rat (female)	Increase in fetal death	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	120 mg/kg bw/day	≥ 29 day(s)	Rat (female)	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	300 mg/kg bw/day	29 day(s)	Rat (male)	No effect	Experimental value	

2-ethylhexyl methacrylate

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	300 mg/kg bw/day	23 days (gestation, daily)	Rabbit	No effect	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	100 mg/kg bw/day	23 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	300 mg/kg bw/day	41 day(s) - 47 day (s)	Rat (female)	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	1000 mg/kg bw/day	49 day(s)	Rat (male)	No effect	Experimental value	

succinic anhydride

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	140 mg/kg bw/day	10 days (gestation, daily)	Rat	Foetus (no effect)	Experimental value	
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	140 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect	Experimental value	
Effects on fertility (Oral (stomach tube))	NOAEL	Equivalent to OECD 416	55 mg/kg bw/day	> 80 day(s)	Rat (male / female)	No effect	Experimental value	

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	

styrene

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (vapours))	NOAEC	Equivalent to OECD 414	≥ 2.556 mg/kg bw/day	10 days (7h / day)	Rat	No effect	Experimental value	
Maternal toxicity (Inhalation (vapours))	LOAEC	Equivalent to OECD 414	1278 mg/l air	10 days (7h / day)	Rat	Maternal toxicity	Experimental value	
Effects on fertility (Inhalation)	NOAEC (P/F1)	OECD 416	0.64 mg/l air	70 day(s)	Rat (male / female)	No effect	Experimental value	

Conclusion

May damage the unborn child.

Aspiration hazard

MEGAPLAST PPE, B

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

Toxicity other effects

MEGAPLAST PPE, B

No (test)data on the mixture available

Chronic effects from short and long-term exposure

MEGAPLAST PPE, B

Skin rash/inflammation.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

MEGAPLAST PPE, B

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

tetrahydrofurfuryl methacrylate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	ASTM E-35.21	34.7 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; Lethal
Acute toxicity crustacea	EC50		97.3 mg/l		Invertebrata		Fresh water	
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	OECD 201	100 mg/l	72 h	Desmodesmus subspicatus	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	37.2 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; Reproduction
Toxicity aquatic micro-organisms								Data waiving

2-ethylhexyl methacrylate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	2.78 mg/l	96 h	Oryzias latipes	Semi-static system	Fresh water	Experimental value
Acute toxicity crustacea	EC50		2.18 mg/l		Invertebrata		Fresh water	
Toxicity algae and other aquatic plants	NOEC	OECD 201	0.28 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	0.105 mg/l	21 day(s)	Daphnia galeata	Semi-static system	Fresh water	Experimental value; Reproduction

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity crustacea	EC50	OECD 202	> 515.4 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 312 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP
	NOEC	OECD 201	≥ 21.1 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; GLP

succinic anhydride

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	> 100 mg/l	96 h	Danio rerio	Semi-static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	EC50	OECD 202	> 102 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	ErC50	OECD 201	> 100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
	NOEC	OECD 201	100 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity fish								Data waiving
Long-term toxicity aquatic crustacea								Data waiving
Toxicity aquatic micro-organisms	EC50	OECD 209	> 300 mg/l	3 h	Activated sludge	Static system	Fresh water	Experimental value; Nominal concentration

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

styrene

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	10 mg/l	96 h	Pimephales promelas	Flow-through system	Fresh water	Experimental value; GLP
Acute toxicity crustacea	EC50	OECD 202	4.7 mg/l	48 h	Daphnia magna	Flow-through system	Fresh water	Experimental value; GLP
Toxicity algae and other aquatic plants	EC50	EPA OTS 797.1050	6.3 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
	EC10	EPA OTS 797.1050	0.28 mg/l	96 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Experimental value; Growth rate
Long-term toxicity aquatic crustacea	NOEC	OECD 211	1.01 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Experimental value; GLP
Toxicity aquatic micro-organisms	NOEC		72 mg/l	16 h	Pseudomonas putida	Static system	Fresh water	Experimental value

nickel diformate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		17.1 mg/l	672 h	Salmo gairdneri			Nickel ion
Toxicity algae and other aquatic plants	EC50		0.18 mg/l	72 h	Selenastrum capricornutum			Nickel ion

Conclusion

Harmful to aquatic life with long lasting effects.

12.2. Persistence and degradability

tetrahydrofurfuryl methacrylate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	75 %; Oxygen consumption	28 day(s)	Experimental value

Phototransformation air (DT50 air)

Method	Value	Conc. OH-radicals	Value determination
AOPWIN v1.92	3.259 h	1.5E6 /cm³	Calculated value

2-ethylhexyl methacrylate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301C	88 %; GLP	28 day(s)	No relevant data available

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Biodegradation water

Method	Value	Duration	Value determination
OECD 301F	≥ 80 %; GLP	28 day(s)	Experimental value

Half-life water (t1/2 water)

Method	Value	Primary degradation/mineralisation	Value determination
OECD 111	11552 h; GLP		Experimental value

succinic anhydride

Biodegradation water

Method	Value	Duration	Value determination
OECD 301E	96.55 %; GLP	28 day(s)	Experimental value

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

styrene

Biodegradation water

Method	Value	Duration	Value determination
ISO 9408	100 %	28 day(s)	Experimental value

Conclusion

Water

Does not contain any not readily biodegradable component(s)

12.3. Bioaccumulative potential

MEGAPLAST PPE, B

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

tetrahydrofurfuryl methacrylate

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		1.76	22.6 °C	Experimental value

2-ethylhexyl methacrylate

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF	OECD 305	37; GLP	56 h	Danio rerio	Experimental value

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 107		4.95	20 °C	Experimental value

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

Log Kow

Method	Remark	Value	Temperature	Value determination
EU Method A.8		0.782	23 °C	Experimental value

succinic anhydride

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
					Data waiving

Log Kow

Method	Remark	Value	Temperature	Value determination
OECD 117		2.44	40 °C	Experimental value

methyl methacrylate

Log Kow

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

styrene

BCF fishes

Parameter	Method	Value	Duration	Species	Value determination
BCF		74			QSAR

Log Kow

Method	Remark	Value	Temperature	Value determination
Equivalent to OECD 107		2.96	25 °C	Experimental value

nickel diformate

Log Kow

Method	Remark	Value	Temperature	Value determination
		-2.47		Estimated value

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

tetrahydrofurfuryl methacrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	1.402 - 1.765	Calculated value

2-ethylhexyl methacrylate

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	2.750	Calculated value

succinic anhydride

(log) Koc

Parameter	Method	Value	Value determination
log Koc	SRC PCKOCWIN v2.0	0.915	Calculated value

methyl methacrylate

(log) Koc

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

styrene

(log) Koc

Parameter	Method	Value	Value determination
log Koc		2.55	

Conclusion

Contains component(s) with potential for mobility in 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 PPE, B

Greenhouse gases

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

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

Groundwater

Groundwater pollutant

tetrahydrofurfuryl methacrylate

Groundwater

Groundwater pollutant

2-ethylhexyl methacrylate

Groundwater

Groundwater pollutant

succinic anhydride

Groundwater

Groundwater pollutant

methyl methacrylate

Groundwater

Groundwater pollutant

nickel diformate

Groundwater

Groundwater pollutant

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.

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

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

Rail (RID)

14.1. UN number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

Inland waterways (ADN)

14.1. UN number/ID number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	
Specific mention	Dangerous only when carried in tank vessels.

Sea (IMDG/IMSBC)

14.1. UN number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Marine pollutant	
Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

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/ID number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Class	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	

Passenger and cargo transport

Limited quantities: maximum net quantity per packaging	

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
0 %	
0 g/l	

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

European drinking water standards (98/83/EC and 2020/2184)

nickel diformate

Parameter	Parametric value	Note	Reference
Nickel	20 µg/l		Listed in Annex I, Part B, of Directive (EU) 2020/2184 on the quality of water intended for human consumption.

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
· tetrahydrofurfuryl methacrylate · 2-ethylhexyl methacrylate · [2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate · methyl methacrylate · styrene	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.
· nickel diformate	Nickel and its compounds	1. Shall not be used: (a) in any post assemblies which are inserted into pierced ears and other pierced parts of

			the human body unless the rate of nickel release from such post assemblies is less than 0,2 µg/cm 2 /week (migration limit); (b) in articles intended to come into direct and prolonged contact with the skin such as: — earrings, — necklaces, bracelets and chains, anklets, finger rings, — wrist-watch cases, watch straps and tighteners, — rivet buttons, tighteners, rivets, zippers and metal marks, when these are used in garments, if the rate of nickel release from the parts of these articles coming into direct and prolonged contact with the skin is greater than 0,5 µg/cm 2 / week. (c) in articles referred to in point (b) where these have a non-nickel coating unless such coating is sufficient to ensure that the rate of nickel release from those parts of such articles coming into direct and prolonged contact with the skin will not exceed 0,5 µg/cm 2 / week for a period of at least two years of normal use of the article. 2. Articles which are the subject of paragraph 1 shall not be placed on the market unless they conform to the requirements set out in that paragraph. 3. The standards adopted by the European Committee for Standardisation (CEN) shall be used as the test methods for demonstrating the conformity of articles to paragraphs 1 and 2. Titles and references of harmonised standards under entry 27 of Annex XVII to REACH (see Commission communication (EU) No 2017/C 011/02)
	· nickel diformate	Substances which are classified as carcinogen category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 1 or Appendix 2, respectively.	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: “Restricted to professional users”. 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists’ paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date; (f) devices covered by Regulation (EU) 2017/745.
	· nickel diformate	Substances which are classified as reproductive toxicant category 1A or 1B in Part 3 of Annex VI to Regulation (EC) No 1272/2008 and are listed in Appendix 5 or Appendix 6, respectively.	Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30: 1. Shall not be placed on the market, or used, — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows: “Restricted to professional users”. 2. By way of derogation, paragraph 1 shall not apply to: (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists’ paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date; (f) devices covered by Regulation (EU) 2017/745.
	· methyl methacrylate · styrene	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	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,

	whether they appear in Part 3 of Annex VI to that Regulation or not.	— 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.
· succinic anhydride · methyl methacrylate · styrene · nickel diformate	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 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.	Mixtures for tattooing purposes are subject to the restrictions of Regulation (EU) 2020/2081

National legislation Belgium

MEGAPLAST PPE, B

Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	reprotoxique catégorie 1A ou 1B selon CLP, n.s.a.

tetrahydrofurfuryl methacrylate

Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	reprotoxique catégorie 1A ou 1B selon CLP, n.s.a.

styrene

Résorption peau	Styrène (monomère); D; La mention “D” signifie que la résorption de l’agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l’exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l’agent dans l’air.
Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	Styrène; VI.2.3.; Liste non limitative de substances, mélanges et procédés visés à l’article VI.2-1, alinéa 3

nickel diformate

Additional classification	Composés du nickel, (mesurée en tant que Ni); C; La mention “C” signifie que l’agent en question relève du champ d’application de l’arrêté royal du 2 décembre 1993 concernant la protection des travailleurs contre les risques liés à l’exposition à des agents cancérigènes et mutagènes et reprotoxiques au travail.
Agents cancérigènes, mutagènes et reprotoxiques et aux agents possédant des propriétés perturbant le système endocrinien (Code du bien-être au travail, Livre VI, titre 2)	cancérigène catégorie 1A ou 1B selon CLP, n.s.a.
	reprotoxique catégorie 1A ou 1B selon CLP, n.s.a.

National legislation The Netherlands

MEGAPLAST PPE, B

Waterbezwaarlijkheid	Z (2); Algemene Beoordelingsmethodiek (ABM)

styrene

SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	styreen; Opgenomen in SZW-lijst van voor de voortplanting giftige stoffen (ontwikkeling); 2

nickel diformate

SZW - Lijst van kankerverwekkende stoffen	nikkeldiformiaat; Opgenomen in SZW-lijst van kankerverwekkende stoffen
SZW - Lijst van voor de voortplanting giftige stoffen (ontwikkeling)	nikkeldiformaat; Opgenomen in SZW-lijst van voor de voortplanting giftige stoffen (ontwikkeling); 1B
SZW - Lijst van voor de voortplanting giftige stoffen (vruchtbaarheid)	nikkeldiformaat; Opgenomen in SZW-lijst van voor de voortplanting giftige stoffen (vruchtbaarheid); 2
SZW - Lijst van voor de voortplanting giftige stoffen (borstvoeding)	nikkeldiformaat; Opgenomen in SZW-lijst van voor de voortplanting giftige stoffen (borstvoeding)

National legislation France

MEGAPLAST PPE, B

No data available

styrene

Catégorie toxique pour la reproduction	Styrène; R2
Risque de pénétration percutanée	Styrène; Risque de pénétration percutanée

National legislation Germany

MEGAPLAST PPE, B

Lagerklasse (TRGS510)	6.1C: Brennbare, akut toxische Kat. 3 / giftige oder chronisch wirkende Gefahrstoffe
WGK	2; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017

tetrahydrofurfuryl methacrylate

TA-Luft	5.2.7.1.3

2-ethylhexyl methacrylate

TA-Luft	5.2.5/I

[2-[(2-methyl-1-oxoallyl)oxy]ethyl] hydrogen succinate

TA-Luft	5.2.5

succinic anhydride

TA-Luft	5.2.5/I

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

styrene

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

nickel diformate

TA-Luft	5.2.7.1.1/I
TRGS900 - Risiko der Fruchtschädigung	Nickel und Nickelverbindungen; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden
Sensibilisierende Stoffe	Nickel und Nickelverbindungen; Sh; Hautsensibilisierende Stoffe

National legislation Austria

MEGAPLAST PPE, B

No data available

methyl methacrylate

Gefahr der Sensibilisierung der Haut	Methylmethacrylat; Sh

styrene

Fortpflanzungsgefährdend [fruchtschädigend (entwicklungsschädigend)]	Styrol; d

nickel diformate

Krebserzeugend	Nickeldiformiat; III A1
Fortpflanzungsgefährdend [fruchtschädigend (entwicklungsschädigend)]	Nickeldiformiat; D
Gefahr der Sensibilisierung der Haut	Nickeldiformiat; Sh

National legislation United Kingdom

MEGAPLAST PPE, B

No data available

Other relevant data

MEGAPLAST PPE, B

No data available

succinic anhydride

IARC - classification	3; Succinic anhydride

methyl methacrylate

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

styrene

IARC - classification	2A; Styrene
TLV - Carcinogen	Styrene; A3

15.2. Chemical safety assessment

No chemical safety assessment is required for a mixture.

tetrahydrofurfuryl methacrylate

A chemical safety assessment has been performed.

SECTION 16: Other information

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

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
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.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H341 Suspected of causing genetic defects.
H350i May cause cancer by inhalation.
H360D May damage the unborn child.
H361d Suspected of damaging the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
H372 Causes damage to organs (ears (hearing damage)) through prolonged or repeated exposure if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.

(*)	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 not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.