SAFETY DATA SHEET

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



MEGAPLAST PPE, A

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

1.1. Product identifier

Product name Registration number REACH Product type REACH : MEGAPLAST PPE, A : Not applicable (mixture)

: Mixture

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

1.2.1 Relevant identified uses

Adhesive: component 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

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						
Muta.	category 2	H341: Suspected of causing genetic defects.				
Resp. Sens.	category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.				
Skin Sens.	category 1	H317: May cause an allergic skin reaction.				
Acute Tox.	category 4	H302: Harmful if swallowed.				
Eye Dam.	category 1	H318: Causes serious eye damage.				

2.2. Label elements



Contains: 2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate); boron, hexaethyl[.mu.-(1,6-hexanediamine-.kappa.N:kappa.N')]di-.

Signal word	Danger		
H-statements			
H341	Suspected of causing genetic defects.		
H334	May cause allergy or asthma symptoms or br	eathing difficulties if inhaled.	
H317	May cause an allergic skin reaction.		
H302	Harmful if swallowed.		
H318	Causes serious eye damage.		
P-statements			
d by: Brandwoorinformat	tiocontrum yoor govoorlijke steffen yzw (PIC)	Rublication date: 2007.09.10	

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG) Technische Schoolstraat 43 A, B-2440 Geel http://www.big.be © BIG vzw Reason for revision: 3.2; 9; 12 Revision number: 0400 Publication date: 2007-09-10 Date of revision: 2021-07-26

BIG number: 45076

16239-022-en

878-2

P280 P284 P304 + P340 P305 + P351 + P338

Wear protective gloves, protective clothing and eye protection/face protection. Wear respiratory protection. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P330 P310

Immediately call a POISON CENTER/doctor.

2.3. Other hazards

Warning! Slipping risk if spill comes in contact with water

SECTION 3: Composition/information on ingredients

Rinse mouth.

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
2-ethyl-2-[[3-(2-methylaziridin-1-yl) propionyl]methyl]propane-1,3-diyl bis(2- methylaziridine-1-propionate)	64265-57-2 264-763-3	15% <c<40%< td=""><td>Muta. 2; H341 Acute Tox. 2; H330 Resp. Sens. 1; H334 Skin Sens. 1; H317 Eye Dam. 1; H318</td><td>(5)(1)(10)</td><td>Constituent</td><td></td></c<40%<>	Muta. 2; H341 Acute Tox. 2; H330 Resp. Sens. 1; H334 Skin Sens. 1; H317 Eye Dam. 1; H318	(5)(1)(10)	Constituent	
boron, hexaethyl[.mu(1,6- hexanediaminekappa.N:.kappa.N')]di-	223674-50-8	10% <c<30%< td=""><td>Skin Sens. 1; H317 Acute Tox. 4; H302 Eye Irrit. 2; H319</td><td>(1)(2)</td><td>Constituent</td><td></td></c<30%<>	Skin Sens. 1; H317 Acute Tox. 4; H302 Eye Irrit. 2; H319	(1)(2)	Constituent	
titanium dioxide 01-2119489379-17	13463-67-7 236-675-5	C<1%		(2)	Constituent	

(1) For H- and EUH-statements in full: see section 16

(2) Substance with a Community workplace exposure limit

(5) This component is physically bound in the product

(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. Immediately 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.

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

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

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

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. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water. Heat exposure: dilute toxic gas/vapour with water spray.

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.

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 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. 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. 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, amines.

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.

Belgium

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

Time-weighted average exposure limit 8 h

Titane (dioxyde de)

Titane (dioxyde de), en Ti	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	10 mg/m³
UK		
Titanium dioxide respirable	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m³
Titanium dioxide total inhalable	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m ³

Titanium dioxide Time-weighted average exposure limit 8 h (TLV - Adopted Value) 10 mg.	rxide T
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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
TiO2	NIOSH	7302
TiO2	NIOSH	7304

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

If applicable and available it will be listed below.

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. Measure the concentration in the air regularly. 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:

Full face mask with filter type A. High vapour/gas concentration: self-contained breathing apparatus (EN 136 + EN 137). b) Hand protection:

Protective gloves against chemicals (EN 374).

There are Brotes again				
	Measured breakthrough time	Thickness	Protection index	Remark
nitrile rubber	> 480 minutes	0.4 mm	Class 6	

c) Eye protection:

Combined eye and respiratory protection.

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
Odour	Mild odour
Odour threshold	No data available in the literature
Colour	White
Particle size	Not applicable (liquid)
Explosion limits	No data available in the literature
Flammability	Not classified as flammable
Log Kow	Not applicable (mixture)
Dynamic viscosity	35000 mPa.s - 65000 mPa.s ; 23 °C
Kinematic viscosity	No data available in the literature
Melting point	No data available in the literature
Boiling point	> 181 °C ; 1013 hPa
Relative vapour density	No data available in the literature
Vapour pressure	No data available in the literature
Solubility	Water ; insoluble
Relative density	1.05 - 1.09
Absolute density	1050 kg/m³ - 1090 kg/m³
Decomposition temperature	No data available in the literature

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

10 mg/m³

Auto-ignition temperature	No data available in the literature
Flash point	> 93 °C ; Closed cup
рН	Not applicable (non-soluble in water)

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, amines.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

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, A

No (test)data on the mixture available

Classification is based on the relevant ingredients

2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50		3038 mg/kg		Rat	Literature study	
Inhalation (aerosol)	LC50		0.25 mg/l	4 h	Rat	Literature study	
boron, hexaethyll.mu(1.6-hexanediaminekappa.N:.kappa.N')]di-							

Route of exposure	Parameter	Method	Value	Exposure time	 Value determination	Remark
Oral			category 4		Literature study	

titanium dioxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
						determination	
Oral	LD50	OECD 401	> 2000 mg/kg bw		Rat (male / female)	Experimental value	
Dermal						Data waiving	
Inhalation (dust)	LC50	OECD 403	> 5.09 mg/l	4 h	Rat (male)	Experimental value	

Conclusion

Harmful if swallowed.

Not classified as acute toxic in contact with skin Not classified as acute toxic if inhaled

Corrosion/irritation

MEGAPLAST PPE, A

No (test)data on the mixture available

Classification is based on the relevant ingredients <u>2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)</u>

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

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

Revision number: 0400

BIG number: 45076

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	Result	Method		Exposure time	e Time	point	Species	Value	Remark
							•	determination	
Eye	Irritating; category 2							Literature study	
tanium dioxide							-		-
Route of exposure	Result	Method		Exposure time	e Time	point	Species	Value determination	Remark
Eye	Not irritating	OECD 40	5		1; 24	; 48; 72 hou	rs Rabbit	Experimental value	
Skin	Not irritating	Equivale OECD 40		4 h	48 ho	ours	Rabbit	Experimental	
auses serious eye da ot classified as irritat ot classified as irritat atory or skin sensitis <u>APLAST PPE, A</u>	ting to the skin ting to the resp ation								
lo (test)data on the r lassification is based									
-ethyl-2-[[3-(2-methy			l]propane						
Route of exposure	Result	Method		Exposure time	Obser point	vation time	Species	Value determinatio	n Remark
Skin	Sensitizing; category 1							Literature study	
Inhalation	Sensitizing; category 1							Literature study	
oron, hexaethyl[.mu.	<u> </u>	l iaminekappa.N	N:.kappa.N	N')]di-					
Route of exposure	Result	Method		Exposure time	Obser point	vation time	Species	Value determinatio	n Remark
Skin	Sensitizing;				pont			Literature study	
tanium dioxide	category 1								
Route of exposure	Result	Method		Exposure time	Obser	vation time	Species	Value determinatio	n Remark
Chin	N - +	g Equivalent 1			point				
Skin	Not sensitizing								
-		429					Mouse (female)	Experimental value	
Inhalation (dust) Inclusion 1ay cause an allergic	Not sensitizing skin reaction.	429		es if inhaled.			Mouse (female)		
Inhalation (dust) nclusion May cause an allergic May cause allergy or a c target organ toxicit GAPLAST PPE, A (test)data on the mi udgement is based or	Not sensitizing skin reaction. isthma sympto ty xture available	429		es if inhaled.			, ,		
Inhalation (dust) <u>nclusion</u> May cause an allergic May cause allergy or a c target organ toxicit <u>GAPLAST PPE, A</u> (test)data on the mi udgement is based of	Not sensitizing skin reaction. isthma sympto t y xture available n the relevant i	429 ms or breathing		es if inhaled. Organ	Effe	ect	, ,		Value
Inhalation (dust) nclusion Aay cause an allergic Aay cause allergy or a c target organ toxicit GAPLAST PPE, A (test)data on the mi udgement is based or tanium dioxide Route of exposure Oral (stomach	Not sensitizing skin reaction. isthma sympto ty xture available n the relevant i	429 ms or breathing	g difficultio	Organ			Mouse (female)	Experimental value Experimental value Species Rat (male /	determination Experimental
Inhalation (dust) nclusion May cause an allergic May cause allergy or a c target organ toxicit GAPLAST PPE, A o (test)data on the mi udgement is based or itanium dioxide Route of exposure Oral (stomach tube)	Not sensitizing skin reaction. isthma sympto ty xture available n the relevant i Parameter	429 ms or breathing ngredients Method	g difficultio	Organ			Mouse (female)	Experimental value Species	determination Experimental value
Inhalation (dust) nclusion May cause an allergic May cause allergy or a ic target organ toxicit GAPLAST PPE, A o (test)data on the mi udgement is based or itanium dioxide Route of exposure Oral (stomach	Not sensitizing skin reaction. isthma sympto ty xture available n the relevant i Parameter	429 ms or breathing ngredients Method	g difficultio	Organ			Mouse (female)	Experimental value Experimental value Species Rat (male /	determination Experimental
Inhalation (dust) Inclusion May cause an allergic May cause an allergic Aay cause allergy or a ic target organ toxicit SAPLAST PPE, A 0 (test)data on the mi udgement is based or itanium dioxide Route of exposure Oral (stomach tube) Dermal Inclusion Iot classified for subc genicity (in vitro) SAPLAST PPE, A No (test)data on the r Classification is based	Not sensitizing skin reaction. Isthma sympto ty xture available n the relevant i Parameter NOAEL hronic toxicity nixture availab	429 ms or breathing ngredients Method OECD 408	g difficultio	Organ			Mouse (female)	Experimental value Experimental value Species Rat (male /	determination Experimental value
Inhalation (dust) Inclusion Aay cause an allergic Aay cause an allergic Aay cause an allergic Carget organ toxicit GAPLAST PPE, A (test)data on the mi udgement is based or tanium dioxide Route of exposure Oral (stomach tube) Dermal Inclusion Iot classified for subc enicity (in vitro) GAPLAST PPE, A Io (test)data on the r Classification is based tanium dioxide	Not sensitizing skin reaction. isthma sympto ty xture available n the relevant i Parameter NOAEL NOAEL hronic toxicity nixture availab on the relevar	429 ms or breathing ngredients Method OECD 408 le nt ingredients	g difficultion Value > 1000 r bw/day	ng/kg		effect	Exposure time 90 day(s)	Experimental value Experimental value Species Rat (male / female)	determination Experimental value Data waiving
Inhalation (dust) Inclusion Aay cause an allergic Aay cause an allergic Aay cause allergy or a c target organ toxicit GAPLAST PPE, A (test)data on the mi udgement is based or tanium dioxide Route of exposure Oral (stomach tube) Dermal Inclusion Iot classified for subc GAPLAST PPE, A Io (test)data on the ri Classification is based	Not sensitizing skin reaction. isthma sympto ty xture available n the relevant i e Parameter NOAEL hronic toxicity hronic toxicity mixture availab on the relevar	429 ms or breathing ngredients Method OECD 408 le nt ingredients od	g difficultion Value > 1000 r bw/day	Organ	No		Exposure time 90 day(s)	Experimental value Experimental value Species Rat (male / female)	determination Experimental value
Inhalation (dust) Inclusion Tay cause an allergic Tay cause an allergic Tay cause allergy or a C target organ toxicit GAPLAST PPE, A (test)data on the mi Udgement is based or tanium dioxide Coral (stomach tube) Dermal Inclusion ot classified for subc GAPLAST PPE, A No (test)data on the ri Classification is based tanium dioxide Result	Not sensitizing skin reaction. Isthma sympto ty xture available n the relevant i Parameter NOAEL NOAEL hronic toxicity nixture availab on the relevar <u>Meth</u> tabolic /e	429 ms or breathing ngredients Method OECD 408 le nt ingredients od	g difficultion Value > 1000 r bw/day	ng/kg	No	effect	Exposure time 90 day(s)	Experimental value Experimental value Species Rat (male / female) Female alue determination	determination Experimental value Data waiving
Inhalation (dust) Inclusion Aay cause an allergic Aay cause an allergic Aay cause allergy or a c target organ toxicit GAPLAST PPE, A (test)data on the mi udgement is based or tanium dioxide Route of exposure Oral (stomach tube) Dermal Inclusion Iot classified for subc enicity (in vitro) GAPLAST PPE, A No (test)data on the r Classification is based tanium dioxide Result Negative with met activation, negative	Not sensitizing skin reaction. Isthma sympto ty xture available n the relevant i Parameter NOAEL NOAEL hronic toxicity nixture availab on the relevar <u>Meth</u> tabolic /e	429 ms or breathing ngredients Method OECD 408 le nt ingredients od 0 473	g difficultion Value > 1000 r bw/day	ng/kg	ovary	effect	Exposure time 90 day(s)	Experimental value Experimental value Species Rat (male / female) Female alue determination	determinatio Experimental value Data waiving

Date of revision: 2021-07-26

Mutagenicity (in vivo)

MEGAPLAST PPE, A

No (test)data on the mixture available

Classification is based on the relevant ingredients

2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

	Result	Method	Exposure time	Test substrate	Organ	Value determination		
	category 2					Literature study		
<u>tita</u>	itanium dioxide							
	Result	Method	Exposure time	Test substrate	Organ	Value determination		
	Negative (Oral (stomach tube))	OECD 474		Mouse (male / female)		Experimental value		

<u>Conclusion</u>

Suspected of causing genetic defects.

Carcinogenicity

MEGAPLAST PPE, A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

titanium dioxide

Route of	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
exposure								
Inhalation	NOAEC	OECD 453	5 mg/m ³ air	104 weeks (6h / day,	Rat (male /	No carcinogenic	Lungs	Experimental value
(dust)			_	5 days / week)	female)	effect	-	
Oral (diet)	NOEL	Carcinogenic	> 50000 ppm	103 weeks (7 days /	Rat (male /	No carcinogenic		Experimental value
		toxicity study		week)	female)	effect		

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

MEGAPLAST PPE, A

No (test)data on the mixture available

Judgement is based on the relevant ingredients titanium dioxide

	Parameter	Method	Value	Exposure time	Species	Effect	- 0-	Value determination
Developmental toxicity (Oral (stomach tube))	NOAEL	OECD 414	0, 0	2 weeks (7 days / week)	Rat	No effect		Experimental value
Maternal toxicity (Oral (stomach tube))	NOAEL	OECD 414	0, 0	2 weeks (7 days / week)	Rat	No effect		Experimental value

Conclusion

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

MEGAPLAST PPE, A

No (test)data on the mixture available

Chronic effects from short and long-term exposure

MEGAPLAST PPE, A

Skin rash/inflammation. Respiratory difficulties.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

MEGAPLAST PPE, A

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

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

Revision number: 0400

BIG number: 45076

itanium dioxide								
	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	Equivalent to OECD 203	> 100 mg/l	96 h	Oncorhynchus mykiss	Static system	Fresh water	Experimental value; Nominal concentration
Acute toxicity crustacea	LC50	Equivalent to OECD 202	> 500 mg/l	48 h	Daphnia magna	Semi-static system	Fresh water	Experimental value; Nominal concentration
Toxicity algae and other aquatic plants	ErC50	EPA 600/9- 78-018	61 mg/l	72 h	Pseudokirchneri ella subcapitata	Static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity fish	NOEC	Equivalent to OECD 212	≥ 1000 mg/l	8 day(s)	Danio rerio	Semi-static system	Fresh water	Experimental value; Nominal concentration
Long-term toxicity aquatic crustacea	NOEC	OECD 211	≥ 2.92 mg/l	21 day(s)	Daphnia magna	Semi-static system	Fresh water	Weight of evidence; GLP

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

MEGAPLAST PPE, A

Method	Remark	Value	Temperature	Value determination
	Not applicable (mixture)			

2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

Parameter	Method	v	/alue	Duration	Species		Value determination		
BCF	BCFBAF v3	.01 7	.22 l/kg; Fresh				Estimated value		
		w	veight						
Log Kow									
Method		Remark		Value		Temperature	Value determination		
KOWWIN				1.81			Estimated value		
nium dioxide									
Log Kow									
Method		Romark		Value		Temperature	Value determination		

Method	Remark	Value	Temperature	Value determination
	No data available			

Conclusion

No straightforward conclusion can be drawn based upon the available numerical values

12.4. Mobility in soil

2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate)

	Parameter	Method	Value	Value determination
	log Koc	SRC PCKOCWIN v2.0	4.280	Calculated value
Percent distribution				

Met	thod	Fraction air	 Fraction sediment	Fraction soil	Fraction water	Value determination
0	acity Model el III	4.64E-12 %	7.71 %	88.9 %	3.38 %	Calculated value

Conclusion

Contains component(s) that adsorb(s) into the soil

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to 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, A

Greenhouse gases

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

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

Ozone-depleting potential (ODP)

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

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), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14. <u>1. UN number</u>			
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			
14.7. Maritime transport in bulk according to IMO instruments	Maritime transport in bulk according to IMO instruments		
Annex II of MARPOL 73/78	Not applicable, based on available data		

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	

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
· 2-ethyl-2-[[3-(2-methylaziridin-1-yl) propionyl]methyl]propane-1,3-diyl bis(2- methylaziridine-1-propionate)	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	 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, Articles not complying with paragraph 1 shall not be placed on the market. 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,

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MEGAPLAST PPE, A			
	development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1.	 present an aspiration hazard and are labelled with H304, 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). 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 legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; 	
<u>National legislation Belgium</u> <u>MEGAPLAST PPE, A</u> No data available			
<u>National legislation The Netherland</u> <u>MEGAPLAST PPE, A</u>	<u>s</u>		
Waterbezwaarlijkheid	B (4); Algemene Beoordelingsmethodie	k (ABM)	
<u>National legislation France</u> <u>MEGAPLAST PPE, A</u> No data available <u>titanium dioxide</u>			
Catégorie cancérogène	Titane (dioxyde de), en Ti; C2		
National legislation Germany MEGAPLAST PPE, A			
Lagerklasse (TRGS510)	10: Brennbare Flüssigkeiten die keiner o	•	
WGK 2-ethyl-2-[[3-(2-methylaziridin-1-	1; Verordnung über Anlagen zum Umga yl)propionyl]methyl]propane-1,3-diyl bis(ing mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 (2-methylaziridine-1-propionate)	
TA-Luft	5.2.5/I		
titanium dioxide			
No data available <u>Other relevant data</u> <u>MEGAPLAST PPE, A</u> No data available titanium dioxide			
IARC - classification	2B; Titanium dioxide		
TLV - Carcinogen	Titanium dioxide; A4		
15.2. Chemical safety assessment No chemical safety assessment h	nt nas been conducted for the mixture.		
CTION 16: Other inform	ation		
Full text of any H- and EUH-stateme H302 Harmful if swallowed. H317 May cause an allergic skin H318 Causes serious eye damag H319 Causes serious eye irritatio H330 Fatal if inhaled.	ents referred to under section 3: I reaction. ge. on. ma symptoms or breathing difficulties if ir	nhaled.	
ADI Acceptab AOEL Acceptab ATE Acute To: CLP (EU-GHS) Classifica DMEL Derived M DNEL Derived M EC50 Effect Co ErC50 EC50 in to LC50 Lethal Co	L CLASSIFICATION BY BIG ble daily intake ble operator exposure level xicity Estimate tition, labelling and packaging (Globally Ha Minimal Effect Level No Effect Level incentration 50 % erms of reduction of growth rate oncentration 50 % osse 50 % rved Adverse Effect Level	rmonised System in Europe)	
eason for revision: 3.2; 9; 12		Publication date: 2007-09-10 Date of revision: 2021-07-26	

NOEC	No Observed Effect Concentration
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.

Reason for revision: 3.2; 9; 12

Publication date: 2007-09-10 Date of revision: 2021-07-26

Revision number: 0400

BIG number: 45076