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

: MEGAPLAST PPE. A Product name **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

Resin

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Novatio*

Industrielaan 5B

B-2250 Olen

3 +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

2 +32 14 85 97 37

4 +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-methylaziridine-1-propionate);\ boron,\ hexaethyl[.mu.-\{1,6-methylaziridine-1-propionate);\$ hexanediamine-.kappa.N:.kappa.N')]di-.

| Signal word | Danger |
|--------------|--------|
| U statements | |

H-statements

Suspected of causing genetic defects. H341

May cause allergy or asthma symptoms or breathing difficulties if inhaled. H334

May cause an allergic skin reaction. H317

Harmful if swallowed. H302 Causes serious eve damage. H318

P-statements

Created by: Brandweerinformatiecentrum voor gevaarlijke stoffen vzw (BIG)

Technische Schoolstraat 43 A, B-2440 Geel

http://www.big.be

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Reason for revision: 3.2; 9; 12

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P280 Wear protective gloves, protective clothing and eye protection/face protection.

P284 Wear respiratory protection.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

P330 Rinse mouth.

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

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.

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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

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| Titane (dioxyde de) | ine (dioxyde de) Time-weighted average exposure limit 8 h | |
|----------------------------------|--|----------------------|
| France | | |
| 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/m³ |
| USA (TLV-ACGIH) | | |
| Titanium dioxide | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 10 mg/m ³ |

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 |
|---|--------------|-------|--------|
| Ī | TiO2 | NIOSH | 7302 |
| ŀ | 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).

| | 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 |

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| 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, hexaethyl[.mu.-(1,6-hexanediamine-.kappa.N:.kappa.N')]di-

| | Route of exposure | Parameter | Method | Value | Exposure time | | Value determination | Remark |
|-------------|-------------------|-----------|--------|------------|---------------|---|------------------------|--------|
| | Oral | | | category 4 | | | Literature study | |
| <u>tita</u> | nium dioxide | | | • | | • | | |

| mum dioxide | | | | | | | | |
|-------------------|-----------|----------|-----------------|---------------|-------------|--------------------|--------|--|
| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value | Remark | |
| | | | | | | determination | | |
| Oral | LD50 | OECD 401 | > 2000 mg/kg bw | | Rat (male / | Experimental value | | |
| | | | | | female) | | | |
| 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

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

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

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boron, hexaethyl[.mu.-(1,6-hexanediamine-.kappa.N:.kappa.N')]di-

| Route of exposure | Result | Method | Exposure time | Time point | Value determination | Remark |
|-------------------|---------------------------|--------|---------------|------------|----------------------------|--------|
| Eye | Irritating; category 2 | | | | Literature study | |

titanium dioxide

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value | Remark |
|-------------------|----------------|---------------|---------------|---------------------|---------|---------------|--------|
| | | | | | | determination | |
| Eye | Not irritating | OECD 405 | | 1; 24; 48; 72 hours | Rabbit | Experimental | |
| | | | | | | value | |
| Skin | Not irritating | Equivalent to | 4 h | 48 hours | Rabbit | Experimental | |
| | | OECD 404 | | | | value | |

Conclusion

Causes serious eye damage.

Not classified as irritating to the skin

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

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 | Result | Method | • | Observation time point | Species | Value determination | Remark |
|-------------------|----------------------------|--------|---|------------------------|---------|---------------------|--------|
| Skin | Sensitizing; category 1 | | | | | Literature study | |
| Inhalation | Sensitizing; category 1 | | | | | Literature study | |

boron, hexaethyl[.mu.-(1,6-hexanediamine-.kappa.N:.kappa.N')]di-

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

titanium dioxide

| Route of exposure | Result | Method | Exposure time | Observation time | Species | Value determination F | Remark |
|-------------------|-----------------|---------------------------|---------------|------------------|----------------|-----------------------|--------|
| | | | | point | | | |
| Skin | | Equivalent to OECD 429 | | | Mouse (female) | Experimental value | |
| Inhalation (dust) | Not sensitizing | | | | Mouse (female) | Experimental value | |

Conclusion

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific target organ toxicity

MEGAPLAST PPE, A

No (test)data on the mixture available

Judgement is based on the relevant ingredients

titanium dioxide

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | | Value determination |
|---------------------|-----------|----------|------------------------|-------|-----------|---------------|-------|------------------------|
| Oral (stomach tube) | NOAEL | OECD 408 | > 1000 mg/kg bw/day | | No effect | l ''' | _ ` ′ | Experimental value |
| Dermal | | | | | | | | Data waiving |

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

MEGAPLAST PPE, A

No (test)data on the mixture available

Classification is based on the relevant ingredients

titanium dioxide

| Result | Method | Test substrate | Effect | Value determination | Remark |
|-------------------------|----------|--------------------------|--------|---------------------|--------|
| -0 | OECD 473 | Chinese hamster ovary | | Experimental value | |
| activation, negative | | (CHO) | | | |
| without metabolic | | | | | |
| activation | | | | | |
| Negative with metabolic | OECD 471 | Bacteria (S.typhimurium) | | Experimental value | |
| activation, negative | | | | | |
| without metabolic | | | | | |
| activation | | | | | |

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Mutagenicity (in vivo)

MEGAPLAST PPE, A

No (test)data on the mixture available

Classification is based on the relevant ingredients

 $\underline{2\text{-ethyl-2-[[3-(2-methylaziridin-1-yl]propionyl]}methyl]propane-1, 3-diyl\ bis (2-methylaziridine-1-propionate)}$

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|------------|--------|---------------|----------------|-------|---------------------|
| category 2 | | | | | Literature study |

titanium dioxide

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|--------------------------------|----------|---------------|-----------------------|-------|---------------------|
| Negative (Oral (stomach tube)) | OECD 474 | | Mouse (male / female) | | Experimental value |

Conclusion

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

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 | Organ | Value |
|--|-----------|----------|----------------------|-------------------------|---------|-----------|-------|--------------------|
| | | | | | | | | determination |
| Developmental toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 0, 0 | 2 weeks (7 days / week) | Rat | No effect | l | Experimental value |
| Maternal toxicity (Oral (stomach tube)) | NOAEL | OECD 414 | 1000 mg/kg bw/day | 2 weeks (7 days / week) | Rat | No effect | l | 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

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titanium dioxide

| | Parameter | Method | Value | Duration | Species | | 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

Log Kow

| | 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)

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------------|------------------|----------|---------|---------------------|
| BCF | BCFBAF v3.01 | 7.22 l/kg; Fresh | | | Estimated value |
| | | weight | | | |

Log Kow

| na .1 1 | a 1 | N/ 1 | | |
|---------|--------|-------|-------------|---------------------|
| Method | Remark | Value | Temperature | Value determination |
| KOWWIN | | 1.81 | | Estimated value |

titanium dioxide

| - | 26 KOT | | | | | |
|---|--------|-------------------|-------|-------------|---------------------|--|
| | 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

 $\underline{\text{2-ethyl-2-[[3-(2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl\ bis (2-methylaziridine-1-propionate)}}$

(log) Koc

| Parameter | Method | Value | Value determination |
|-----------|-------------------|-------|---------------------|
| log Koc | SRC PCKOCWIN v2.0 | 4.280 | Calculated value |

Percent distribution

| Method | Fraction air | Fraction sediment | Fraction soil | Fraction water | Value determination |
|----------------|--------------|-----------------------|---------------|----------------|---------------------|
| Fugacity Model | 4.64E-12 % | | 88.9 % | 3.38 % | Calculated value |
| Level III | | | | | |

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)

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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</u> . 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. <u>6</u> . 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 |

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) | 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; | 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, |

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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,

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.

National legislation Belgium

MEGAPLAST PPE, A

No data available

National legislation The Netherlands

MEGAPLAST PPE, A

Waterbezwaarlijkheid B (4); Algemene Beoordelingsmethodiek (ABM)

National legislation France

MEGAPLAST PPE, A

No data available

titanium dioxide

Catégorie cancérogène Titane (dioxyde de), en Ti; C2

National legislation Germany

MEGAPLAST PPE, A

| Lagerklasse (TRGS510) | 10: Brennbare Flüssigkeiten die keiner der vorgenannten LGK zuzuordnen sind | | | |
|--|---|--|--|--|
| WGK 1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 | | | | |
| 2-ethyl-2-[[3-{2-methylaziridin-1-yl)propionyl]methyl]propane-1,3-diyl bis(2-methylaziridine-1-propionate) | | | | |
| TA-Luft | 5.2.5/I | | | |
| titanium dioxide | | | | |
| TA-Luft 5.2.1 | | | | |

National legislation United Kingdom

MEGAPLAST PPE, A

No data available

Other relevant data

MEGAPLAST PPE, A

No data available titanium dioxide

| IARC - classification | 2B; Titanium dioxide |
|-----------------------|----------------------|
| TIV - Carcinogen | Titanium dioxide: A4 |

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

SECTION 16: Other information

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

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H341 Suspected of causing genetic defects.

(*) INTERNAL CLASSIFICATION BY BIG

ADI Acceptable daily intake

AOEL Acceptable operator exposure level

ATE Acute Toxicity Estimate

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

DMEL Derived Minimal Effect Level
DNEL Derived No Effect Level
EC50 Effect Concentration 50 %

ErC50 EC50 in terms of reduction of growth rate

LC50 Lethal Concentration 50 %

LD50 Lethal Dose 50 %

NOAEL No Observed Adverse Effect Level

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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.

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