Rubio Monocoat DuroGrit

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 24/03/2023 Revision date: 28/02/2025 Supersedes: 3/04/2024 Version: 1.4

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

1.1. Product identifier

Product form : Mixture
Product name : Rubio Monocoat DuroGrit

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

1.2.1. Relevant identified uses

Intended for general public

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Muylle Facon B.V.B.A. - Rubio Monocoat
Ambachtenstraat 58
B 8870 Izegem
Belgium
T +32 (0) 51 30 80 54, F +32 (0) 51 30 99 78
info@rubiomonocoat.com, www.rubiomonocoat.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Belgium	Muylle Facon B.V.B.A. - Rubio Monocoat	Ambachtenstraat 58 8870 Izegem	T +32 (0) 51 30 80 54	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazardous to the aquatic environment – Chronic Hazard, Category 3 H412

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

CLP Signal word : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P102 - Keep out of reach of children.
P273 - Avoid release to the environment.
P501 - Dispose of contents/container in accordance with local regulations.
EUH-statements : EUH211 - Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
EUH208 - Contains mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1), reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene)

and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene), 3-iodo-2-propynyl butylcarbamate. May produce an allergic reaction.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

Component	
mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (127519-17-9)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
2-methoxy-1-methylethylacetat (108-65-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
3-iodo-2-propynyl butylcarbamate (55406-53-6)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates	CAS-No.: 127519-17-9 EC-No.: 407-000-3 EC Index-No.: 607-281-00-4 REACH-no: 01-0000015648-61	<3	Aquatic Chronic 2, H411
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] substance with national workplace exposure limit(s) (BE, DK, FR, GB, SE, NO)	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2 REACH-no: 01-2119489379-17	0-20	Carc. 2, H351
reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene)	EC-No.: 400-830-7 EC Index-No.: 607-176-00-3 REACH-no: 01-0000015075-76	<1	Skin Sens. 1, H317 Aquatic Chronic 2, H411

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
3-iodo-2-propynyl butylcarbamate	CAS-No.: 55406-53-6 EC-No.: 259-627-5 EC Index-No.: 616-212-00-7 REACH-no: 01-2120762115-60	<0,2	Acute Tox. 3 (Inhalation), H331 (ATE=0,68 mg/l/4h) Skin Sens. 1, H317 STOT RE 1, H372 Acute Tox. 4 (Oral), H302 (ATE=1470 mg/kg bodyweight) Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)
2-methoxy-1-methylethylacetat substance with national workplace exposure limit(s) (BE, DK, FR, GB, NL, CH); substance with a Community workplace exposure limit	CAS-No.: 108-65-6 EC-No.: 203-603-9 EC Index-No.: 607-195-00-7 REACH-no: 01-2119475791-29	<0,15	Flam. Liq. 3, H226 STOT SE 3, H336
mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) substance with national workplace exposure limit(s) (CH)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	<0,0005	Acute Tox. 2 (Inhalation), H330 (ATE=0,05 mg/l/4h) Acute Tox. 2 (Dermal), H310 (ATE=50 mg/kg bodyweight) Acute Tox. 3 (Oral), H301 (ATE=66 mg/kg bodyweight) Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 (M=100) Aquatic Chronic 1, H410 (M=100)

Specific concentration limits:		
Name	**Product identifier**	**Specific concentration limits**
mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1)	CAS-No.: 55965-84-9 EC Index-No.: 613-167-00-5 REACH-no: 01-2120764691-48	(0,0015 ≤ C ≤ 100) Skin Sens. 1A; H317 (0,06 ≤ C < 0,6) Eye Irrit. 2; H319 (0,06 ≤ C < 0,6) Skin Irrit. 2; H315 (0,6 ≤ C ≤ 100) Eye Dam. 1; H318 (0,6 ≤ C ≤ 100) Skin Corr. 1C; H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation : under the recommended handling conditions: not required.
First-aid measures after skin contact : If on skin : Wash with plenty of soap and water.
First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion : In all cases of doubt, or when symptoms persist, seek medical attention.

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

Symptoms/effects : Get medical advice/attention if you feel unwell.
Symptoms/effects after inhalation : None under normal conditions.
Symptoms/effects after skin contact : None under normal conditions.
Symptoms/effects after eye contact : None under normal conditions.
Symptoms/effects after ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

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

Show this safety data sheet to the doctor or emergency department.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Can't burn. Water mist, carbonic acid, foam or powder against surrounding fire.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not applicable (the mixture is not flammable).

5.3. Advice for firefighters

Precautionary measures fire : Evacuate area.
Firefighting instructions : Prevent fire fighting water from entering the environment.
Protection during firefighting : Self-contained breathing apparatus.
Other information : Exercise caution when fighting any chemical fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Do not get in eyes, on skin, or on clothing. Use personal protective equipment - see point 8. Limit spread.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Avoid discharge into the sewer - see point 12. Inform the local environmental authorities in the event of a release to the surroundings.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.
Methods for cleaning up : Liquid is absorbed with granules or similar. Collect in suitable containers. Rinse thoroughly with water. Further handling of spillage - see point 13.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See above (see point 6.1/6.2/6.3).

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Do not eat, drink or smoke while using this product.
Precautions for safe handling : Avoid contact with the eyes and prolonged contact with the skin. After use, wash with plenty of soap and water.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed.

7.3. Specific end use(s)

See application - point 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
Switzerland - Occupational Exposure Limits	
Local name	5-Chlor-2-methyl-2,3-dihydro-isothiazol-3-on und 2-Methyl-2,3-dihydroisothiazol-3-on
VME [mg/m³]	0,2 mg/m³
VLE [mg/m³]	0,4 mg/m³
Notation	Keine Schädigung der Leibesfrucht bei Einhaltung des MAK-Werts

2-methoxy-1-methylethylacetat (108-65-6)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOELV TWA (mg/m³)	275 mg/m³
IOELV TWA (ppm)	50 ppm
IOELV STEL (mg/m³)	550 mg/m³
IOELV STEL (ppm)	100 ppm
Belgium - Occupational Exposure Limits	
Local name	Acétate de 2-(1-méthoxy)propyle # 2-(1-Methoxy)propylacetaat
Limit value [mg/m³]	275 mg/m³
Limit value [ppm]	50 ppm
Short time value [mg/m³]	550 mg/m³
Short time value [ppm]	100 ppm
Remark (BE)	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. # D: de vermelding “D” betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Denmark - Occupational Exposure Limits	
Local name	2-methoxy-1-methylethylacetat
Grænseværdi (8 timer) (mg/m³)	275 mg/m³
Grænseværdi (8 timer) (ppm)	50 ppm
Grænseværdi (STEL) (mg/m³)	550 mg/m³
Grænseværdi (STEL) (ppm)	100 ppm
Remark	E - H
France - Occupational Exposure Limits	
VME [mg/m³]	275 mg/m³
VME [ppm]	50 ppm
VLE [mg/m³]	550 mg/m³
VLE [ppm]	100 ppm

2-methoxy-1-methylethylacetat (108-65-6)	
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m³)	550 mg/m³
Grenswaarde TGG 8H (ppm)	100 ppm
United Kingdom - Occupational Exposure Limits	
Local name	1-Methoxypropyl acetate
WEL TWA (mg/m³)	274 mg/m³
WEL TWA (ppm)	50 ppm
WEL STEL (mg/m³)	548 mg/m³
WEL STEL (OEL STEL) [ppm]	100 ppm
Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Switzerland - Occupational Exposure Limits	
VME [mg/m³]	275 mg/m³
VLE [mg/m³]	275 mg/m³

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Belgium - Occupational Exposure Limits	
Local name	Titane (dioxyde de) # Titaandioxide
Limit value [mg/m³]	10 mg/m³
Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
Denmark - Occupational Exposure Limits	
Local name	Titandioxid, beregnet som Ti
Grænseværdi (8 timer) (mg/m³)	6 mg/m³
Grænseværdi (STEL) (mg/m³)	12 mg/m³
Remark	K
France - Occupational Exposure Limits	
VME [mg/m³]	10 mg/m³
Sweden - Occupational Exposure Limits	
Local name	Titandioxid
Nivågränsvärde (NVG) (mg/m³)	5 mg/m³
United Kingdom - Occupational Exposure Limits	
Local name	Titanium dioxide
WEL TWA (mg/m³)	10 mg/m³ 4 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Norway - Occupational Exposure Limits	
Local name	Titandioksid
Grenseverdier (AN) (mg/m³)	5 mg/m³

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Titanium dioxide
ACGIH TWA (mg/m³)	0,2 mg/m³ (Nanoscale particles. R - Repirable particulate matter) 2,5 mg/m³ (Finescale particles. R - Repirable particulate matter)
Remark (ACGIH)	TLV® Basis: LRT irr; pneumoconiosis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
Regulatory reference	ACGIH 2023

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	0,04 mg/m³
Long-term - local effects, inhalation	0,02 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	0,11 mg/kg bw/day
Acute - local effects, inhalation	0,04 mg/m³
Long-term - systemic effects,oral	0,09 mg/kg bw/day
Long-term - local effects, inhalation	0,02 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	3,39 µg/l
PNEC aqua (marine water)	3,39 µg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,027 mg/kg dwt
PNEC sediment (marine water)	0,027 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,01 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0,23 mg/l

2-methoxy-1-methylethylacetat (108-65-6)	
DNEL/DMEL (Workers)	
Acute - local effects, inhalation	550 mg/m³
Long-term - systemic effects, dermal	153,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m³
DNEL/DMEL (General population)	
Acute - systemic effects, oral	500 mg/kg bw/day
Long-term - systemic effects,oral	1,67 mg/kg bodyweight/day

2-methoxy-1-methylethylacetat (108-65-6)	
Long-term - systemic effects, inhalation	33 mg/m³
Long-term - systemic effects, dermal	54,8 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m³
PNEC (Water)	
PNEC aqua (freshwater)	0,635 mg/l
PNEC aqua (marine water)	0,064 mg/l
PNEC aqua (intermittent, freshwater)	3,29 mg/l
PNEC aqua (intermittent, marine water)	0,329 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3,29 mg/kg dwt
PNEC sediment (marine water)	0,329 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,29 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	0,07 mg/m³
Acute - local effects, inhalation	1,16 mg/m³
Long-term - systemic effects, dermal	2 mg/kg bw/day
Long-term - systemic effects, inhalation	0,023 mg/m³
Long-term - local effects, inhalation	1,16 mg/m³
DNEL/DMEL (additional information)	
Additional information	No data available
PNEC (Water)	
PNEC aqua (freshwater)	0,001 mg/l
PNEC aqua (marine water)	0 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,017 mg/kg dwt
PNEC sediment (marine water)	0,002 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,005 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	0,44 mg/l
PNEC (additional information)	
Additional information	No data available

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
DNEL/DMEL (Workers)	
Long-term - local effects, inhalation	1,25 mg/m³
DNEL/DMEL (General population)	
Long-term - local effects, inhalation	210 µg/m³

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
During spraying wear suitable respiratory equipment.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection			
Type	**Use**	**Characteristics**	**Standard**
Safety glasses	Droplet	With side shields	EN 166

8.2.2.2. Skin protection

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
protective gloves	Nitrile rubber (NBR)	5 (> 240 minutes)	>0,3		EN 374-2

8.2.2.3. Respiratory protection

Respiratory protection:
Usually not necessary. In case of insufficient ventilation or spraying: Use approved mask with particle filter P2 (EN149). The filters have a limited service life (must be changed). Read the manufacturer's instructions.

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
Gas/Particle Filter	typeA/P2		EN 140

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:
Avoid release to the environment.

Other information:
Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	Not available
Appearance	:	Liquid.
Odour	:	Not available
Odour threshold	:	Not available

Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	Not available
Flammability	:	Not available
Explosive limits	:	Not available
Lower explosive limit (LEL)	:	Not available
Upper explosive limit (UEL)	:	Not available
Flash point	:	> 100 °C
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
pH	:	> 6,5 – < 7,5
Viscosity, kinematic	:	Not available
Solubility	:	Not available
Log Kow	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	Not available
Relative vapour density at 20°C	:	Not available
Particle characteristics	:	Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

VOC content : 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable in use and storage conditions as recommended in item 7.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Avoid oxidizing agents as well as strong acids and bases.

10.6. Hazardous decomposition products

Under fire conditions, hazardous fumes will be present.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
LD50 oral rat	66 mg/kg bodyweight (OECD 401: Acute oral toxicity, Rat, Male/female, Experimental value, Calculated per active substance, Oral, 14 day(s))
LD50 oral	59 mg/kg bodyweight
LD50 dermal rat	> 141 mg/kg bodyweight (OECD 402: Acute dermal toxicity, 24 h, Rat, Male/female, Experimental value, Calculated per active substance, Dermal, 14 day(s))
LD50 dermal	> 75 mg/kg bodyweight
LC50 Inhalation - Rat	0,17 mg/l air (OECD 403: Acute inhalation toxicity, 4 h, Rat, Male/female, Experimental value, Calculated per active substance, Inhalation (substance), 14 day(s))

reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (127519-17-9)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg

2-methoxy-1-methylethylacetat (108-65-6)	
LD50 oral rat	6190 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg bodyweight

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
LD50 oral rat	1470 mg/kg bodyweight (OESO 401: Acute oral toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	0,68 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value, Inhalation (vapour), 14 day(s))

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
LD50 oral rat	> 2000 mg/kg bodyweight (OESO 401: Acute oral toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	5,09 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male/female, Experimental value, Inhalation (vapour), 14 day(s))

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: > 6,5 – < 7,5

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: > 6,5 – < 7,5

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

2-methoxy-1-methylethylacetat (108-65-6)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
STOT-repeated exposure	Causes damage to organs (larynx) through prolonged or repeated exposure (if inhaled).

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not applicable.
Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic) : Harmful to aquatic life with long lasting effects.
Not rapidly degradable

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
LC50 fish 1	0,28 mg/l (96 h; Lepomis macrochirus)
EC50 Daphnia 1	0,007 mg/l (48 h, Acartia tonsa, Salt water, Experimental value, GLP)
EC50 other aquatic organisms 1	0,126 mg/l waterflea
EC50 other aquatic organisms 2	0,003 mg/l
ErC50 (algae)	19,9 µg/l (OECD 201: Algae: Growth inhibition test, 72 h, Skeletonema costatum, Static system, Salt water, Experimental value, GLP)
Threshold limit algae 1	0,018 mg/l (72 h; Pseudokirchneriella subcapitata)

reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (127519-17-9)	
LC50 fish 1	> 9,9 mg/l (OECD 203: Fish: Acute Toxicity Study, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
EC50 Daphnia 1	3,2 mg/l (OECD 202: Acute immobilisation test Daphnia sp., 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	> 2 mg/l (OECD 201: Algae: Growth inhibition study, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

2-methoxy-1-methylethylacetat (108-65-6)	
LC50 fish 1	161 mg/l (96 h; Pimephales promelas)
LC50 fish 2	100 – 180 mg/l (96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	380 mg/l (48 h; Daphnia magna)
ErC50 (algae)	> 1000 mg/l (OECD 201: Algae: Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Threshold limit algae 1	≥ 1000 mg/l (96 h; Pseudokirchneriella subcapitata)
Threshold limit algae 2	> 1000 mg/l (96 h; Pseudokirchneriella subcapitata)

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
LC50 fish 1	67 µg/l (EPA OPP 72-1, 96 u, Oncorhynchus mykiss, Doorstroomsysteem, Zoet water, Experimentele waarde, GLP)
ErC50 (algae)	53 µg/l (OECD 201: Algae: Growth inhibition study, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
Threshold limit algae 1	0,022 mg/l (72 h; Scenedesmus subspicatus)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
LC50 fish 1	> 1000 mg/l (Pisces, Fresh water, Literature study)
EC50 Daphnia 1	> 1000 mg/l (Invertebrata, Fresh water, Literature study)
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Algae: growth inhibition study, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)

12.2. Persistence and degradability

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
Persistence and degradability	Readily biodegradable in water.

reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (127519-17-9)	
Persistence and degradability	Readily biodegradable in water.

2-methoxy-1-methylethylacetat (108-65-6)	
Persistence and degradability	Biodegradability not applicable.

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
Persistence and degradability	Biodegradability not applicable.
Chemical oxygen demand (COD)	1,15 g O_2/g substance

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Persistence and degradability	Biodegradability not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
BCF fish 1	41 – 54 (OECD 305: Bioconcentration: flow-through fish test, 28 day(s), Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Fresh weight)
Log Pow	-0,32 – 0,7 (Experimental value, OECD 117: Partition coefficient (n-octanol/water), HPLC method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 500).

reaction mass of branched and linear C7-C9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates (127519-17-9)	
BCF fish 1	1,1 – 3 (Equivalent or similar to OECD 305, 56 day(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value, GLP)
Log Pow	9,2 (Calculated, CLOGP, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 500).

2-methoxy-1-methylethylacetat (108-65-6)	
Log Pow	1,2
Bioaccumulative potential	Low bioaccumulation potential.

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
Log Pow	2,8 (Experimental value, OECD 107: Partition coefficient (n-octanol/water): Shake flask method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Bioaccumulative potential	No potential for bioaccumulation.

12.4. Mobility in soil

Rubio Monocoat DuroGrit	
Ecology - soil	mobile in soils.

mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1) (55965-84-9)	
Surface tension	No data available in the literature
Log Koc	0,81 – 1 (log Koc, Calculated value)
Ecology - soil	Very mobile in the soils.

2-methoxy-1-methylethylacetat (108-65-6)	
Surface tension	0,0294 N/m (20 °C; 100 vol %)
Log Koc	0,602 – 1,079 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	mobile in soils.

3-iodo-2-propynyl butylcarbamate (55406-53-6)	
Mobility in soil	Low adsorption capacity in soil
Surface tension	69,1 mN/m (158 mg/l, EU Method A.5: Surface tension)
Log Koc	1,8 – 2,5 (log Koc, Calculated value)

titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Surface tension	No data available in the literature
Ecology - soil	Little ability for mobility in soil.

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

12.7. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Waste disposal according to Directive 2008/98/EC, covering waste and dangerous waste.

Sewage disposal recommendations	:	Disposal must be done according to official regulations.
Waste disposal recommendations	:	Discharging into rivers and drains is forbidden. Dispose of in accordance with relevant local regulations.
Additional information	:	Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials	:	Avoid release to the environment.
European List of Waste (LoW, EC 2000/532)	:	16 10 01-
H code	:	Z

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Overland transport
Not applicable

Transport by sea
Not applicable

Air transport
Not applicable

Inland waterway transport
Not applicable

Rail transport
Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)
Contains no substance(s) listed on the REACH Candidate List
Contains no substance(s) listed on REACH Annex XIV (Authorisation List)
Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)
Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)
VOC content : 0 %
Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
Hazardous Incident Ordinance (12. BImSchV) : Is not subject to the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

ABM category : A(3) - hazardous for aquatic organisms, may have longterm hazardous effects in aquatic environment
SZW-list of carcinogenic substances : None of the components are listed
SZW-list of mutagenic substances : None of the components are listed
NON-exhaustive list of reprotoxic substances - Breastfeeding : None of the components are listed
SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed
NON-exhaustive list of reprotoxic substances - Development : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

Switzerland

Storage class (LK) : LK 10/12 - Liquids

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:	
Acute Tox. 2 (Dermal)	Acute toxicity (dermal), Category 2
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Carc. 2	Carcinogenicity, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3

Full text of H- and EUH-statements:	
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1A	Skin sensitisation, category 1A
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains mixture of 5-chloro-2-methyl-4-isothiazolin-3-one [EC 247-500-7] and 2-methyl-2Hisothiazol-3-one [EC 220-239-6] (3:1) (C(M)IT/MIT (3:1), reaction mass of α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-hydroxypoly(oxyethylene) and α-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyl-ω-3-(3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl)propionyloxypoly(oxyethylene), 3-iodo-2-propynyl butylcarbamate. May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

The classification complies with : ATP 18

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.