

RAPTOR ENGINE ENAMEL PRIMER GREY

Safety Data Sheet

according to the Hazardous Substances and New Organisms Act (1996)
Issue date: 5/1/2019 Revision date: 8/1/2023 Supersedes: 5/1/2019 Version: 2.0

SECTION 1: Identification

1.1 Product identifier

Trade name : RAPTOR ENGINE ENAMEL PRIMER GREY
Product form : Mixture
Type of product : Coatings and paints, thinners, paint removers
Product code : REEPG/AL

1.2 Other means of identification

No additional information available

1.3 Recommended use of the chemical and restrictions on use

Recommended use : Primer

1.4 Details of manufacturer or importer

Distributor

U-POL New Zealand Limited Ltd
c/o Lindsay & Associates Unit H, 12 Amara Place, East Tamaki
Manukau City Auckland 2013
New Zealand
T + 612 4731 2655 / 027 630 3691 - F + 612 4731 2611
info@u-pol.co.nz - www.u-pol.com

1.5. Emergency phone number

Emergency number : Australia (CHEMTREC): + (61) - 290372994

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

HSNO Approval Number : HSR002517

Classification according to the Environmental Protection Authority notices (EPA Hazardous Substances and New Organisms Act 1996)

Aerosol, Category 1	H222
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Carcinogenicity, Category 2	H351
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Hazardous to the aquatic environment – Chronic Hazard, Category 2	H411

2.2. GHS Label elements, including precautionary statements

GHS NZ labelling

Hazard pictograms (GHS NZ) :



Signal word (GHS NZ) :

Danger

Contains :

methyl acetate (5 – 23 %); 1-butanol (5 – 23 %); titanium(IV) oxide (5 – 23 %); 1-methoxy-2-propanol (< 5 %); cyclohexanone (< 5 %); isobutanol (< 5 %)

Hazard statements (GHS NZ) :

H222 - Extremely flammable aerosol
H315 - Causes skin irritation
H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness
H351 - Suspected of causing cancer
H411 - Toxic to aquatic life with long lasting effects

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Precautionary statements	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. P103 - Read carefully and follow all instructions.
Prevention	: P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211 - Do not spray on an open flame or other ignition source. P251 - Do not pierce or burn, even after use. P261 - Avoid breathing fume, spray, vapours. P264 - Wash hands thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves.
Response	: P302+P352 - IF ON SKIN: Wash with plenty of water. 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. P308+P313 - IF exposed or concerned: Get medical advice. P332+P313 - If skin irritation occurs: Get medical advice. P362 - Take off contaminated clothing. P391 - Collect spillage.
Storage	: P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
Disposal	: P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GHS NZ
dimethyl ether	CAS-No.: 115-10-6	43 – 63	Flam. Gas 1, H220 Press. Gas (Liq.), H280
methyl acetate	CAS-No.: 79-20-9	5 – 23	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336
1-butanol	CAS-No.: 71-36-3	5 – 23	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H336
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	CAS-No.: 13463-67-7	5 – 23	Carc. 2, H351 Aquatic Acute 3, H402
1-methoxy-2-propanol	CAS-No.: 107-98-2	< 5	Flam. Liq. 3, H226 STOT SE 3, H336
acetic acid ethenyl ester, polymer with ethenol, cyclic acetal with butanal	CAS-No.: 68648-78-2	< 100	Not classified

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Name	Product identifier	%	Classification according to GHS NZ
trizinc bis(orthophosphate)	CAS-No.: 7779-90-0	< 5	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
cyclohexanone	CAS-No.: 108-94-1	< 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation:vapour), H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 Ecotoxicity to terrestrial vertebrates C, H433
kaolin	CAS-No.: 1332-58-7	< 5	Not classified
2-methylpropan-1-ol; iso-butanol	CAS-No.: 78-83-1	< 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335
amorphous silica	CAS-No.: 67762-90-7	< 5	Not classified
phosphoric acid ... %, orthophosphoric acid ... %	CAS-No.: 7664-38-2	< 5	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Acute 2, H401 Hazardous to terrestrial vertebrates, H434
carbon black	CAS-No.: 1333-86-4	< 5	Not classified
phenol; carboic acid; monohydroxybenzene; phenylalcohol	CAS-No.: 108-95-2	< 5	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Inhalation:dust,mist), H331 Skin Corr. 1B, H314 Muta. 2, H341 STOT RE 2, H373 Aquatic Acute 2, H401 Aquatic Chronic 2, H411 Hazardous to terrestrial vertebrates, H434
2-methoxypropanol	CAS-No.: 1589-47-5	< 5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 1B, H360 STOT SE 3, H335
toluene	CAS-No.: 108-88-3	< 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401
quartz	CAS-No.: 14808-60-7	< 5	Not classified

SECTION 4: First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

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First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Symptoms caused by exposure

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Irritation.
Symptoms/effects after eye contact	: Serious damage to eyes.

4.3. Medical attention and special treatment

Other medical advice or treatment	: Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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5.2. Specific hazards arising from the chemical

Fire hazard	: Extremely flammable aerosol.
Explosion hazard	: Pressurised container: May burst if heated.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No additional information available

6.1.1. For non-emergency personnel

Protective equipment	: Safety glasses. Protective clothing. Gloves.
Emergency procedures	: Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing fume, spray, vapours. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: Mechanically recover the product. Notify authorities if product enters sewers or public waters.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing fume, spray, vapours. Avoid contact with skin and eyes.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep cool.
- Storage temperature : < 25 °C
- Special rules on packaging : Keep only in original container.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

toluene (108-88-3)	
New Zealand - Occupational Exposure Limits	
Local name	Toluene (Toluol)
WES-TWA (OEL TWA) [1]	188 mg/m ³
WES-TWA (OEL TWA) [2]	50 ppm
Remark (NZ)	skin (Skin absorption)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Toluene
BEI	0.03 mg/l Parameter: Toluene - Medium: Urine - Sampling time: End of exposure or end of shift 0.3 mg/g creatinine Parameter: o-Cresol (following hydrolysis) - Medium: Urine - Sampling time: End of exposure or end of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
carbon black (1333-86-4)	
New Zealand - Occupational Exposure Limits	
Local name	Carbon black
WES-TWA (OEL TWA) [1]	3 mg/m ³
Remark (NZ)	6.7B (Suspected carcinogen)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
New Zealand - Occupational Exposure Limits	
Local name	Phenol
WES-TWA (OEL TWA) [1]	3.8 mg/m ³
WES-TWA (OEL TWA) [2]	1 ppm
WES-STEL (OEL STEL)	7.7 mg/m ³

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phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
WES-STEL (OEL STEL) [ppm]	2 ppm
Remark (NZ)	skin (Skin absorption)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
New Zealand - Biological Exposure Indices	
Local name	Phenol
BEI	100 mg/l Parameter: Total phenol - Medium: Urine - Sampling time: End of shift
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
2-methylpropan-1-ol; iso-butanol (78-83-1)	
New Zealand - Occupational Exposure Limits	
Local name	Isobutyl alcohol
WES-TWA (OEL TWA) [1]	152 mg/m ³
WES-TWA (OEL TWA) [2]	50 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
1-butanol (71-36-3)	
New Zealand - Occupational Exposure Limits	
Local name	n-Butyl alcohol
WES-C (OEL C)	150 mg/m ³
WES-C (OEL C) [ppm]	50 ppm
Remark (NZ)	skin (Skin absorption)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
kaolin (1332-58-7)	
New Zealand - Occupational Exposure Limits	
Local name	Kaolin
WES-TWA (OEL TWA) [1]	10 mg/m ³ 2 mg/m ³ r (The value for respirable dust)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
1-methoxy-2-propanol (107-98-2)	
New Zealand - Occupational Exposure Limits	
Local name	Propylene glycol monomethyl ether
WES-TWA (OEL TWA) [1]	369 mg/m ³
WES-TWA (OEL TWA) [2]	100 ppm
WES-STEL (OEL STEL)	553 mg/m ³
WES-STEL (OEL STEL) [ppm]	150 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
New Zealand - Occupational Exposure Limits	
Local name	Phosphoric acid
WES-TWA (OEL TWA) [1]	1 mg/m ³
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

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titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
New Zealand - Occupational Exposure Limits	
Local name	Titanium dioxide
WES-TWA (OEL TWA) [1]	10 mg/m ³
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
dimethyl ether (115-10-6)	
New Zealand - Occupational Exposure Limits	
Local name	Dimethylether
WES-TWA (OEL TWA) [1]	766 mg/m ³
WES-TWA (OEL TWA) [2]	400 ppm
WES-STEL (OEL STEL)	958 mg/m ³
WES-STEL (OEL STEL) [ppm]	500 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
methyl acetate (79-20-9)	
New Zealand - Occupational Exposure Limits	
Local name	Methyl acetate
WES-TWA (OEL TWA) [1]	606 mg/m ³
WES-TWA (OEL TWA) [2]	200 ppm
WES-STEL (OEL STEL)	757 mg/m ³
WES-STEL (OEL STEL) [ppm]	250 ppm
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition
cyclohexanone (108-94-1)	
New Zealand - Occupational Exposure Limits	
Local name	Cyclohexanone
WES-TWA (OEL TWA) [1]	100 mg/m ³
WES-TWA (OEL TWA) [2]	25 ppm
Remark (NZ)	skin (Skin absorption)
Regulatory reference	Workplace Exposure Standards and Biological Exposure Indices, 12th Edition

Exposure limit values for the other components

No additional information available

8.2. Monitoring methods

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment : Gloves. Protective clothing. Safety glasses.
Materials for protective clothing : Impermeable clothing
Hand protection : Protective gloves
Eye protection : Safety glasses
Skin and body protection : Wear suitable protective clothing
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment

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Personal protective equipment symbol(s)



Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state	: Liquid
Appearance	: Aerosol.
Colour	: Light grey
Odour	: characteristic
Odour threshold	: No additional information available
pH	: No additional information available
Evaporation rate	: No additional information available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point / Freezing point	: No additional information available
Boiling point	: No data available
Flash point	: -41 °C
Auto-ignition temperature	: No data available
Flammability	: Extremely flammable aerosol.
Vapour pressure	: No additional information available
Relative density	: No additional information available
Density	: Density: 0.83 g/cm ³
Solubility	: insoluble in water. soluble in most organic solvents.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: 14 mm ² /s
Viscosity, dynamic	: No data available
Explosive properties	: Pressurised container: May burst if heated.
Explosive limits	: No additional information available
Minimum ignition energy	: No data available
VOC content	: 690 g/l
Gas group	: Press. Gas (Liq.)
Percent Solids	: 16.74 wt%

SECTION 10: Stability and reactivity

Reactivity	: Extremely flammable aerosol. Pressurised container: May burst if heated.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Incompatible materials	: No additional information available
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Toxicity

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

amorphous silica (67762-90-7)

LD50 oral rat	> 5000 mg/kg (OECD Test Guideline 401, comparable product)
LD50 dermal rat	> 2000 mg/kg (OECD Test Guideline 402)

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toluene (108-88-3)	
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77
LC50 Inhalation - Rat	28.1 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours))
LC50 Inhalation - Rat (Vapours)	25.7 mg/l/4h (Equivalent or similar to OECD 403, 4 h, Rat, Male, Experimental value, Inhalation (vapours))
carbon black (1333-86-4)	
LD50 oral rat	> 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
LD50 oral rat	650 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rat	660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Dermal, 7 day(s))
2-methylpropan-1-ol; iso-butanol (78-83-1)	
LD50 oral rat	> 2830 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 18.18 mg/l air (6 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
LC50 Inhalation - Rat (Vapours)	24.6 mg/l/4h (Other, 4 h, Rat, Male/female, Experimental value, Inhalation (vapours))
1-butanol (71-36-3)	
LD50 oral rat	≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	≈ 3430 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 17.76 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
quartz (14808-60-7)	
LD50 oral rat	> 500 mg/kg
1-methoxy-2-propanol (107-98-2)	
LD50 oral rat	4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	13 g/kg
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
LD50 oral rat	301 mg/kg (OECD 423)
LD50 dermal rabbit	2750 mg/kg
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)

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titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
trizinc bis(orthophosphate) (7779-90-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 5.41 mg/l/4h (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male/female, Read-across, Inhalation (dust))
dimethyl ether (115-10-6)	
LC50 Inhalation - Rat [ppm]	164000 ppm Animal: rat, Animal sex: male, 95% CL: 142000 - 203000
methyl acetate (79-20-9)	
LD50 oral rat	6482 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	49 mg/l
cyclohexanone (108-94-1)	
LD50 oral rat	1890 – 2650 mg/kg bodyweight (BASF test, Rat, Experimental value, Oral, 7 day(s))
LD50 oral	1620 mg/kg
LD50 dermal rabbit	1100 mg/kg (BRENNTAG test)
LC50 Inhalation - Rat	> 6.2 mg/l air Animal: rat
LC50 Inhalation - Rat (Vapours)	8000 mg/l/4h
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.
Reproductive toxicity	: Not classified
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
NOAEL (animal/male, F0/P)	> 500
STOT-single exposure	: May cause drowsiness or dizziness.
toluene (108-88-3)	
STOT-single exposure	May cause drowsiness or dizziness.
2-methylpropan-1-ol; iso-butanol (78-83-1)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
1-butanol (71-36-3)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.
2-methoxypropanol (1589-47-5)	
STOT-single exposure	May cause respiratory irritation.
1-methoxy-2-propanol (107-98-2)	
STOT-single exposure	May cause drowsiness or dizziness.
methyl acetate (79-20-9)	
STOT-single exposure	May cause drowsiness or dizziness.

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STOT-repeated exposure : Not classified

toluene (108-88-3)	
LOAEL (oral, rat, 90 days)	1250 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (oral, rat, 90 days)	625 mg/kg bodyweight Animal: rat, Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, vapour, 90 days)	2.355 mg/l air Animal: rat, Guideline: EU Method B.29 (Sub-Chronic Inhalation Toxicity:90-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
LOAEL (dermal, rat/rabbit, 90 days)	260 mg/kg bodyweight Animal: rabbit
NOAEL (dermal, rat/rabbit, 90 days)	130 mg/kg bodyweight Animal: rabbit
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

2-methylpropan-1-ol; iso-butanol (78-83-1)	
NOAEL (oral, rat, 90 days)	> 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

1-butanol (71-36-3)	
LOAEL (oral, rat, 90 days)	500 mg/kg bodyweight Animal: rat
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat

1-methoxy-2-propanol (107-98-2)	
LOAEL (oral, rat, 90 days)	2757 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (oral, rat, 90 days)	919 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	> 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

methyl acetate (79-20-9)	
LOAEC (inhalation, rat, vapour, 90 days)	2000 mg/l
NOAEC (inhalation, rat, vapour, 90 days)	1057 mg/m ³

cyclohexanone (108-94-1)	
NOAEL (oral, rat, 90 days)	143 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Aspiration hazard : Not classified

RAPTOR ENGINE ENAMEL PRIMER GREY	
Vaporizer	Aerosol
Viscosity, kinematic	14 mm ² /s
toluene (108-88-3)	
Viscosity, kinematic	No data available in the literature
carbon black (1333-86-4)	
Viscosity, kinematic	Not applicable (solid)

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phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
Viscosity, kinematic	No data available in the literature
2-methylpropan-1-ol; iso-butanol (78-83-1)	
Viscosity, kinematic	No data available in the literature
1-butanol (71-36-3)	
Viscosity, kinematic	No data available in the literature
1-methoxy-2-propanol (107-98-2)	
Viscosity, kinematic	No data available in the literature
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
Viscosity, kinematic	No data available in the literature
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Viscosity, kinematic	Not applicable (solid)
trizinc bis(orthophosphate) (7779-90-0)	
Viscosity, kinematic	Not applicable (solid)
dimethyl ether (115-10-6)	
Viscosity, kinematic	Not applicable (gas)
methyl acetate (79-20-9)	
Viscosity, kinematic	No data available in the literature
cyclohexanone (108-94-1)	
Viscosity, kinematic	No data available in the literature

SECTION 12: Ecological information

12.1. Ecotoxicity

Ecology - general	: Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Toxic to aquatic life with long lasting effects.
Soil toxicity	: Not classified
Terrestrial vertebrate toxicity	: Not classified
Terrestrial invertebrate toxicity	: Not classified

amorphous silica (67762-90-7)	
	> 2000 mg/kg (OECD Test Guideline 402)
LD50 oral rat	> 5000 mg/kg (OECD Test Guideline 401, comparable product)
toluene (108-88-3)	
LC50 - Fish [1]	5.5 mg/l Test organisms (species): Oncorhynchus kisutch
LOEC (chronic)	2.76 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC (chronic)	0.74 mg/l Test organisms (species): Ceriodaphnia dubia Duration: '7 d'
NOEC chronic fish	1.39 mg/l Test organisms (species): Oncorhynchus kisutch Duration: '40 d'
BCF - Fish [1]	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, 95% CL: 9,63 - 20,77

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toluene (108-88-3)	
LD50 oral rat	5580 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: EU Method B.1 (Acute Toxicity (Oral)), 95% CL: 5300 - 5910
carbon black (1333-86-4)	
LC50 - Fish [1]	> 1000 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	> 5600 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 24 h, Daphnia magna, Static system, Fresh water, Experimental value, Locomotor effect)
EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 algae	> 10000 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, Nominal concentration)
LD50 oral rat	> 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
LC50 - Fish [1]	8.9 mg/l (US EPA, 96 h, Oncorhynchus mykiss, Flow-through system, Fresh water, Experimental value)
EC50 - Crustacea [1]	3.1 mg/l Test organisms (species): Ceriodaphnia dubia
EC50 72h - Algae [1]	180 mg/l Test organisms (species): Dunaliella tertiolecta
EC50 72h - Algae [2]	217.6 mg/l Test organisms (species): Dunaliella tertiolecta
NOEC (chronic)	0.16 mg/l Test organisms (species): Daphnia magna Duration: '16 d'
NOEC chronic fish	0.077 mg/l Test organisms (species): other:Cirrhina mrigala Duration: '60 d'
BCF - Fish [1]	17.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 3 h, Danio rerio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.47 (Experimental value, Equivalent or similar to OECD 117, 30 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.15 – 1.86 (log Koc, Calculated value)
	660 mg/kg (Equivalent or similar to OECD 402, 24 h, Rat, Female, Experimental value, Dermal, 7 day(s))
LD50 oral rat	650 mg/kg (Equivalent or similar to OECD 401, Rat, Male, Experimental value, Oral, 14 day(s))
2-methylpropan-1-ol; iso-butanol (78-83-1)	
LC50 - Fish [1]	1430 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1100 mg/l Test organisms (species): Daphnia pulex
EC50 72h - Algae [1]	1799 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)
NOEC (chronic)	20 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.47 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
LD50 dermal rabbit	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rabbit, Male, Experimental value, Dermal, 14 day(s))
LD50 oral rat	> 2830 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))

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1-butanol (71-36-3)	
LC50 - Fish [1]	1376 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	1328 mg/l Test organisms (species): Daphnia magna
ErC50 algae	225 mg/l (OECD 201: Alga, Growth Inhibition Test, 96 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP)
NOEC (chronic)	4.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	4.1 mg/l
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.54 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
LD50 dermal rabbit	≈ 3430 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 oral rat	≈ 2292 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
quartz (14808-60-7)	
LD50 oral rat	> 500 mg/kg
2-methoxypropanol (1589-47-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.49 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
1-methoxy-2-propanol (107-98-2)	
LC50 - Fish [1]	≥ 1000 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Lethal)
EC50 - Other aquatic organisms [1]	2954 mg/l Test organisms (species): other aquatic crustacea:Acartia tonsa
ErC50 algae	> 1000 mg/l (7 day(s), Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
	13 g/kg
LD50 oral rat	4016 mg/kg bodyweight (EU Method B.1 tris: Acute oral toxic – Acute toxic class method, Rat, Male / female, Experimental value, Oral, 14 day(s))
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
LC50 - Fish [1]	3 – 3.25 mg/l Lepomis macrochirus (Bluegill)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
ErC50 other aquatic plants	> 100 mg/l OECD 201, Desmodesmus subspicatus
NOEC chronic algae	100 mg/l Desmodesmus subspicatus
Partition coefficient n-octanol/water (Log Pow)	-2
LD50 dermal rabbit	2750 mg/kg
LD50 oral rat	301 mg/kg (OECD 423)

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titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
LC50 - Fish [1]	155 mg/l Test organisms (species): other:Japanese Medaka
EC50 - Crustacea [1]	19.3 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	27.8 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
trizinc bis(orthophosphate) (7779-90-0)	
LC50 - Fish [1]	0.169 mg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across, Lethal)
EC50 - Crustacea [1]	0.86 mg/l (EPA 600/4-85/013: Method for measuring the acute toxicity of effluents to freshwater and marine organisms, 48 h, Daphnia magna, Static system, Fresh water, Read-across, GLP)
BCF - Other aquatic organisms [1]	116 – 60960 (21 day(s), Gammarus sp., Semi-static system, Salt water, Read-across, Fresh weight)
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
dimethyl ether (115-10-6)	
LC50 - Fish [1]	> 4.1 g/l Test organisms (species): Poecilia reticulata
EC50 - Crustacea [1]	> 4.4 g/l Test organisms (species): Daphnia magna
Partition coefficient n-octanol/water (Log Pow)	0.1 (Experimental value)
methyl acetate (79-20-9)	
LC50 - Fish [1]	250 – 350 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	1026.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 120 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
BCF - Fish [1]	< 1 (Pisces, Literature study)
Partition coefficient n-octanol/water (Log Pow)	0.18 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.18 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
	> 2000 mg/kg bodyweight Animal: rat, Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 oral rat	6482 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
cyclohexanone (108-94-1)	
LC50 - Fish [1]	527 – 732 mg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

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cyclohexanone (108-94-1)	
ErC50 algae	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)
Partition coefficient n-octanol/water (Log Pow)	0.86 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.18 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
LD50 dermal rabbit	1100 mg/kg (BRENNTAG test)
LD50 oral rat	1890 – 2650 mg/kg bodyweight (BASF test, Rat, Experimental value, Oral, 7 day(s))

12.2. Persistence and degradability

RAPTOR ENGINE ENAMEL PRIMER GREY	
Persistence and degradability	No additional information available
toluene (108-88-3)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	2.15 g O ₂ /g substance
Chemical oxygen demand (COD)	2.52 g O ₂ /g substance
ThOD	3.13 g O ₂ /g substance
BOD (% of ThOD)	0.69
carbon black (1333-86-4)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
Persistence and degradability	Biodegradable in the soil. Inhibits biodegradation processes in the soil. Readily biodegradable in water. Readily biodegradable in water in anaerobic conditions.
Biochemical oxygen demand (BOD)	1.68 g O ₂ /g substance
Chemical oxygen demand (COD)	2.28 g O ₂ /g substance
ThOD	2.38 g O ₂ /g substance
2-methylpropan-1-ol; iso-butanol (78-83-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
1-butanol (71-36-3)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.1 – 1.92 g O ₂ /g substance
Chemical oxygen demand (COD)	2.46 g O ₂ /g substance
ThOD	2.59 g O ₂ /g substance
2-methoxypropanol (1589-47-5)	
Persistence and degradability	Readily biodegradable in water.
1-methoxy-2-propanol (107-98-2)	
Persistence and degradability	Readily biodegradable in the soil. Readily biodegradable in water.
ThOD	1.95 g O ₂ /g substance

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phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable.
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)
trizinc bis(orthophosphate) (7779-90-0)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
dimethyl ether (115-10-6)	
Persistence and degradability	Non degradable in the soil. Not readily biodegradable in water.
methyl acetate (79-20-9)	
Persistence and degradability	Readily biodegradable in water.
cyclohexanone (108-94-1)	
Persistence and degradability	Biodegradable in the soil. Readily biodegradable in water.
Biochemical oxygen demand (BOD)	1.232 g O ₂ /g substance
Chemical oxygen demand (COD)	2.605 g O ₂ /g substance
ThOD	2.605 g O ₂ /g substance
12.3. Bioaccumulative potential	
RAPTOR ENGINE ENAMEL PRIMER GREY	
Bioaccumulative potential	No additional information available
toluene (108-88-3)	
BCF - Fish [1]	90 (72 h, Leuciscus idus, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
carbon black (1333-86-4)	
Bioaccumulative potential	Not bioaccumulative.
phenol; carbolic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
BCF - Fish [1]	17.5 (OECD 305: Bioconcentration: Flow-Through Fish Test, 3 h, Danio rerio, Flow-through system, Fresh water, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.47 (Experimental value, Equivalent or similar to OECD 117, 30 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.15 – 1.86 (log Koc, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
2-methylpropan-1-ol; iso-butanol (78-83-1)	
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.47 (log Koc, SRC PCKOCWIN v2.0, Calculated value)

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2-methylpropan-1-ol; iso-butanol (78-83-1)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
1-butanol (71-36-3)	
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.54 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
2-methoxypropanol (1589-47-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.49 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Not bioaccumulative.
1-methoxy-2-propanol (107-98-2)	
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
Partition coefficient n-octanol/water (Log Pow)	-2
Bioaccumulative potential	Does not contain bioaccumulative component(s).
titanium dioxide; [in powder form containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm] (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
trizinc bis(orthophosphate) (7779-90-0)	
BCF - Other aquatic organisms [1]	116 – 60960 (21 day(s), Gammarus sp., Semi-static system, Salt water, Read-across, Fresh weight)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).
dimethyl ether (115-10-6)	
Partition coefficient n-octanol/water (Log Pow)	0.1 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
methyl acetate (79-20-9)	
BCF - Fish [1]	< 1 (Pisces, Literature study)
Partition coefficient n-octanol/water (Log Pow)	0.18 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.18 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
cyclohexanone (108-94-1)	
Partition coefficient n-octanol/water (Log Pow)	0.86 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.18 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

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12.4. Mobility in soil

RAPTOR ENGINE ENAMEL PRIMER GREY	
Mobility in soil	No additional information available
toluene (108-88-3)	
Surface tension	27.73 mN/m (25 °C, 0.05 %)
Partition coefficient n-octanol/water (Log Pow)	2.73 (Experimental value, 20 °C)
Ecology - soil	Low potential for adsorption in soil.
carbon black (1333-86-4)	
Surface tension	Not applicable (solid)
Ecology - soil	No (test)data on mobility of the substance available. Not toxic to plants. Not toxic to animals.
phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)	
Surface tension	71.3 mN/m (20 °C, 0.118 %)
Partition coefficient n-octanol/water (Log Pow)	1.47 (Experimental value, Equivalent or similar to OECD 117, 30 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.15 – 1.86 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
2-methylpropan-1-ol; iso-butanol (78-83-1)	
Surface tension	69.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.47 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
1-butanol (71-36-3)	
Surface tension	69.9 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	1 (Experimental value, OECD 117: Partition Coefficient (n-octanol/water), HPLC method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.54 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil. May be harmful to plant growth, blooming and fruit formation.
2-methoxypropanol (1589-47-5)	
Partition coefficient n-octanol/water (Log Pow)	-0.49 (Estimated value, KOWWIN)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.
1-methoxy-2-propanol (107-98-2)	
Surface tension	70.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Partition coefficient n-octanol/water (Log Pow)	< 1 (Experimental value, Equivalent or similar to OECD 117, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.152 (log Koc, SRC PCKOCWIN v2.0, Calculated value)
Ecology - soil	Highly mobile in soil.

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phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	-2
Ecology - soil	No (test)data on mobility of the component(s) available.
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	Low potential for mobility in soil.
trizinc bis(orthophosphate) (7779-90-0)	
Surface tension	70.4 mN/m (20 °C, 2.7E-4 %, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	Adsorbs into the soil.
dimethyl ether (115-10-6)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	0.1 (Experimental value)
Ecology - soil	Not applicable (gas).
methyl acetate (79-20-9)	
Surface tension	24 mN/m (20 °C)
Partition coefficient n-octanol/water (Log Pow)	0.18 (Experimental value, 20 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.18 (log Koc, OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC), Experimental value, GLP)
Ecology - soil	Highly mobile in soil.
cyclohexanone (108-94-1)	
Surface tension	No data available in the literature
Partition coefficient n-octanol/water (Log Pow)	0.86 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.18 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

14.1. UN number

UN-No. (UN RTDG) : 1950
UN-No. (IMDG) : 1950
UN-No. (IATA) : 1950

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14.2. UN Proper Shipping Name

Proper Shipping Name (UN RTDG) : AEROSOLS
Proper Shipping Name (IMDG) : AEROSOLS
Proper Shipping Name (IATA) : Aerosols, flammable

14.3. Transport hazard class(es)

UN RTDG

Transport hazard class(es) (UN RTDG) : 2.1
Danger labels (UN RTDG) : 2.1



IMDG

Transport hazard class(es) (IMDG) : 2.1
Danger labels (IMDG) : 2.1



IATA

Transport hazard class(es) (IATA) : 2.1
Danger labels (IATA) : 2.1



14.4. Packing group

Packing group (UN RTDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : True
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

Transport by road and rail

Special provisions (UN RTDG) : 63, 190, 277, 327, 344, 381
Limited quantities (UN RTDG) : See SP 277
Excepted quantities (UN RTDG) : E0
Packing instruction (UN RTDG) : P207, LP200
Special packing provisions (UN RTDG) : PP87, L2

Transport by sea

Special provisions (IMDG) : 63, 190, 277, 327, 344, 381, 959
Packing instructions (IMDG) : P207, LP200
Special packing provisions (IMDG) : PP87, L2
EmS-No. (Fire) : F-D - FIRE SCHEDULE Delta - FLAMMABLE GASES
EmS-No. (Spillage) : S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG) : None
Stowage and handling (IMDG) : SW1, SW22
Segregation (IMDG) : SG69

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Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

14.7. Transport in bulk according to IMO instruments

Not applicable

14.8. Hazchem or Emergency Action Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Hazardous Substances and New Organisms Act

HSNO Approval Number	: HSR002517
Group standard	: Aerosols

amorphous silica (67762-90-7)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR003053
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toluene (108-88-3)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001227
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carbon black (1333-86-4)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR002801
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phenol; carboic acid; monohydroxybenzene; phenylalcohol (108-95-2)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR006982
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2-methylpropan-1-ol; iso-butanol (78-83-1)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001097
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1-butanol (71-36-3)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001096
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quartz (14808-60-7)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR003125
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1-methoxy-2-propanol (107-98-2)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001187
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phosphoric acid ... %, orthophosphoric acid ... % (7664-38-2)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001545(dilution) HSR001571(dilution)
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trizinc bis(orthophosphate) (7779-90-0)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR003554
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dimethyl ether (115-10-6)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR000995
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methyl acetate (79-20-9)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001188
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cyclohexanone (108-94-1)

Hazardous Substances and New Organisms Act

HSNO Approval Number	HSR001112
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15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

SDS Major/Minor	: None
Issue date	: 5/1/2019
Revision date	: 01/08/2023
Supersedes	: 01/05/2019

Full text of H-statements

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4

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Full text of H-statements	
Acute Tox. 4 (Inhalation:vapour)	Acute toxicity (inhalation:vapour) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aerosol 1	Aerosol, Category 1
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Acute 2	Hazardous to the aquatic environment – Acute Hazard, Category 2
Aquatic Acute 3	Hazardous to the aquatic environment – Acute Hazard, Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Ecotoxicity to terrestrial vertebrates C	Ecotoxicity to terrestrial vertebrates C
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Hazardous to terrestrial vertebrates	Hazardous to terrestrial vertebrates
Met. Corr. 1	Corrosive to metals, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
Repr. 1B	Reproductive toxicity, Category 1B
Repr. 2	Reproductive toxicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
H220	Extremely flammable gas
H222	Extremely flammable aerosol
H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H280	Contains gas under pressure; may explode if heated
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic in contact with skin
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage

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Full text of H-statements	
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H411	Toxic to aquatic life with long lasting effects
H433	Harmful to terrestrial vertebrates
H434	Hazardous to terrestrial vertebrates

Safety Data Sheet (SDS), New Zealand

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