

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

1.1 Product identifier

greenteQ Hybrid Montagekleber kristallklar
Article number: 217.274/8859

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

1.2.1 Relevant uses

Adhesive

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company VBH Holding GmbH
Siemensstrasse 38
70825 Korntal-Münchingen / GERMANY
Phone +49 (0) 7150-15-0
Fax +49(0) 71 50-15-315
Homepage www.vbh.de
E-mail info@vbh.de

Address enquiries to

Technical information info@vbh.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Skin Sens. 1: H317 May cause an allergic skin reaction.
Eye Irrit. 2: H319 Causes serious eye irritation.
Aquatic Acute 1: H400 Very toxic to aquatic life.
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms



Signal word WARNING

Contains: Trimethoxyvinylsilane
Diocetyl tinbis(acetylacetonate)

Hazard statements H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements P261 Avoid breathing dust.
P273 Avoid release to the environment.
P280 Wear protective gloves / eye protection / face protection.
P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

Environmental hazards	Does not contain any PBT or vPvB substances.
Other hazards	Contains no ingredients with endocrine-disrupting properties. Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
1 - <3	3-(Trimethoxysilyl)propylamine CAS: 13822-56-5, EINECS/ELINCS: 237-511-5, Reg-No.: 01-2119510159-45-XXXX GHS/CLP: Eye Dam. 1: H318 - Skin Irrit. 2: H315
1 - <10	Trimethoxyvinylsilane CAS: 2768-02-7, EINECS/ELINCS: 220-449-8, Reg-No.: 01-2119513215-52-XXXX GHS/CLP: Flam. Liq. 3: H226 - Acute Tox. 4: H332 - Skin Sens. 1B: H317
0,1 - <1	Dioctyltinbis(acetylacetonate) CAS: 54068-28-9, EINECS/ELINCS: 483-270-6, Reg-No.: 01-0000020199-67-XXXX GHS/CLP: STOT SE 2: H371 - Skin Sens. 1: H317 SCL [%]: 5: Skin Sens. 1: H317
0,1 - <1	Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate CAS: 63843-89-0, EINECS/ELINCS: 264-513-3, Reg-No.: 01-2119978231-37-XXXX GHS/CLP: Acute Tox. 4: H302 - STOT RE 1: H372 - Aquatic Chronic 1: H410, M-Factor (chronic): 10
0,01 - <0,1	Pyrithione zinc CAS: 13463-41-7, EINECS/ELINCS: 236-671-3, EU-INDEX: 613-333-00-7 GHS/CLP: Acute Tox. 3: H301 - Eye Dam. 1: H318 - Aquatic Acute 1: H400 - Aquatic Chronic 1: H410 - Acute Tox. 2: H330 - Repr. 1B: H360D - STOT RE 1: H372, M-Factor (acute): 1000, M-Factor (chronic): 10

Comment on component parts	Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%. For full text of H-statements: see SECTION 16.
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SECTION 4: First aid measures

4.1 Description of first aid measures

General information	Take off contaminated clothing and wash before reuse.
Inhalation	In the event of symptoms seek medical treatment. Ensure supply of fresh air.
Skin contact	In case of contact with skin wash off immediately with soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Foam, dry powder, water spray jet, carbon dioxide.
Extinguishing media that must not be used	Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
In the event of fire the following can be released:
Nitrogen oxides (NO_x), carbon monoxide (CO).
Hydrogen chloride (HCl).

5.3 Advice for firefighters

Use self-contained breathing apparatus.
Do not inhale explosion and/or combustion gases.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Collect contaminated firefighting water separately, must not be discharged into the drains.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Use personal protective equipment.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.
In case the product spills into drains/surface waters/groundwater, immediately inform the authorities.
Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.
No special measures necessary.

Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Clean skin thoroughly after work, apply skin cream.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep container in a well-ventilated place.
storage stability [months]: 12

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
Industrial, inhalative, Long-term - systemic effects, 7,1 mg/m ³
Industrial, dermal, Long-term - systemic effects, 1 mg/kg bw/day
Industrial, inhalative, Acute - systemic effects, 260 mg/m ³
general population, oral, Long-term - systemic effects, 8 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 0,5 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 1,7 mg/m ³
general population, inhalative, Acute - systemic effects, 50 mg/m ³
Trimethoxyvinylsilane, CAS: 2768-02-7
Industrial, inhalative, Long-term - systemic effects, 27,6 mg/m ³
Industrial, inhalative, Acute - systemic effects, 260 mg/m ³
Industrial, dermal, Long-term - systemic effects, 3,9 mg/kg bw/day
general population, oral, Long-term - systemic effects, 0,3 mg/kg bw/day
general population, dermal, Long-term - systemic effects, 7,8 mg/kg bw/day
general population, inhalative, Long-term - systemic effects, 6,7 mg/m ³
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
Industrial, dermal, Long-term - systemic effects, 70 µg/kg bw/day
Industrial, inhalative, Acute - systemic effects, 84 mg/m ³
Bis(1,2,2,6,6-pentamethyl-4-piperidinyl)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
Industrial, inhalative, Long-term - systemic effects, 50 µg/m ³
Industrial, dermal, Long-term - systemic effects, 70 µg/kg bw/day
general population, inhalative, Long-term - systemic effects, 10 µg/m ³
general population, dermal, Long-term - systemic effects, 33 µg/kg bw/day
general population, oral, Long-term - systemic effects, 3 µg/kg bw/day

PNEC

Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
soil, 45 µg/kg soil dw
freshwater, 330 µg/L
seawater, 33 µg/L
sewage treatment plants (STP), 13 mg/L
sediment (freshwater), 1,2 mg/kg sediment dw
sediment (seawater), 120 µg/kg sediment dw
Trimethoxyvinylsilane, CAS: 2768-02-7
freshwater, 400 µg/L
sediment (seawater), 0,15 mg/kg dw
sediment (freshwater), 1,5 mg/kg dw
seawater, 40 µg/L

soil, 0.06 mg/kg dw
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
sediment (freshwater), 155 µg/kg sediment dw
sewage treatment plants (STP), 1 mg/L
seawater, 2.6 µg/L
sediment (seawater), 15.5 µg/kg sediment dw
freshwater, 26 µg/L
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
sediment (freshwater), 504,4 mg/kg sediment dw
freshwater, 40 ng/L
seawater, 4 ng/L
sewage treatment plants (STP), 1 mg/L
sediment (seawater), 50,44 mg/kg sediment dw

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
Eye protection	safety glasses (EN 166:2001)
Hand protection	0,5 mm Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Light protective clothing.
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection. Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
Thermal hazards	No information available.
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	pasty
Color	various
Odor	characteristic
Odour threshold	No information available.
pH-value	not applicable
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	No information available.
Flammability (solid, gas) [°C]	hardly inflammable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not applicable
Density [g/cm ³]	1,045 (20°C)
Relative density	not determined
Bulk density [kg/m ³]	not applicable
Solubility in water	insoluble
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	No information available.
Kinematic viscosity	No information available.
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	No information available.
Particle characteristics	No information available.

9.2 Other information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

See SECTION 10.3.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Strong heating.

10.4 Conditions to avoid

See SECTION 7.2.
Strong heating.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Product
ATE-mix, oral, Rat, > 2000 mg/kg
Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
LD50, oral, Rat, 2,97 mL/kg bw, OECD 401
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, oral, Rat, 7120 mg/kg (OECD TG 401)
NOAEL, oral, Rat, < 62,5 mg/kg (28 d) (OECD TG 422)
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
LD50, oral, Rat, 2500 mg/kg bw, OECD 423
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
LD50, oral, Rat, 1490 mg/kg bw
Pyrithione zinc, CAS: 13463-41-7
ATE, oral, 221 mg/kg, ECHA,

Acute dermal toxicity

Product
ATE-mix, dermal, Rabbit, > 2000 mg/kg
Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
LD50, dermal, Rabbit, 11,3 mL/kg bw, OECD 402
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, dermal, Rabbit, 3259 mg/kg bw
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
LD50, dermal, Rat, > 2000 mg/kg (OECD 402)
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
LD50, dermal, Rat, 3170 mg/kg bw
Pyrithione zinc, CAS: 13463-41-7
LD50, dermal, Rat, >2000 mg/kg bw

Acute inhalational toxicity

Product
ATE-mix, inhalative, Rat, > 20 mg/l
Substance
Trimethoxyvinylsilane, CAS: 2768-02-7
LD50, inhalative, Rat, 16,8 mg/l (4 h) (OECD TG 403)
NOAEL, inhalative, Rat, 0,058 mg/l (98 d)
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
LC50, inhalative, Rat, 460 mg/m ³ (4h)

Pyrithione zinc, CAS: 13463-41-7

ATE, inhalativ (dust), 0,14 mg/L, ECHA,

Serious eye damage/irritation Based on the available information, the classification criteria are fulfilled.
Irritant

Substance

3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5

Eye, Rabbit, OECD 405, corrosive

Trimethoxyvinylsilane, CAS: 2768-02-7

Eye, Rabbit, OECD 405, 24h, non-irritating

Diocetylbinbis(acetylacetonate), CAS: 54068-28-9

Eye, Rabbit, OECD 405, non-irritating

Skin corrosion/irritation Based on the available information, the classification criteria are not fulfilled.

Substance

3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5

dermal, Rabbit, OECD 404, irritant

Trimethoxyvinylsilane, CAS: 2768-02-7

dermal, Rabbit, 24h, non-irritating

Diocetylbinbis(acetylacetonate), CAS: 54068-28-9

dermal, Rabbit, OECD 404, non-irritating

Respiratory or skin sensitisation Based on the available information, the classification criteria are fulfilled.
May cause an allergic skin reaction.

Substance

3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5

dermal, Guinea pig, OECD 406, non-sensitizing

Trimethoxyvinylsilane, CAS: 2768-02-7

dermal, ECHA, sensitising

Diocetylbinbis(acetylacetonate), CAS: 54068-28-9

dermal, Mouse (female), OECD 429, sensitising

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Substance

Diocetylbinbis(acetylacetonate), CAS: 54068-28-9

LOAEL, oral, Rat, 11,8 ng/kg bw/day, OECD 414, adverse effect observed

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance

3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5

NOAEL, oral, Rat, 100 mg/kg bw/day, OECD 408, adverse effect observed

Trimethoxyvinylsilane, CAS: 2768-02-7

NOAEL, inhalation (vapour), Rat, 0,058 mg/kg, OECD 413

Diocetylbinbis(acetylacetonate), CAS: 54068-28-9

NOAEL, oral, Rat, 2,5 mg/kg bw/day, OECD 422, adverse effect observed

NOAEC, inhalative, Rat, 100 mg/m³, OECD 413, adverse effect observed

Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
in vitro, OECD 471, negativ
Trimethoxyvinylsilane, CAS: 2768-02-7
in vitro, OECD 471, negativ
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
in vitro, OECD 476, negativ

Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 414, no adverse effect observed
Trimethoxyvinylsilane, CAS: 2768-02-7
Rat, OECD 422, negativ
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
LOAEL, oral, Rat, 4 mg/kg bw /day, OECD 422, no adverse effect observed

Carcinogenicity

Based on the available information, the classification criteria are not fulfilled.

Aspiration hazard

Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.

SECTION 12: Ecological information

12.1 Toxicity

Substance
3-(Trimethoxysilyl)propylamine, CAS: 13822-56-5
LC50, (96h), fish, 934 mg/L
EC50, (72h), Algae, >603 - 1000 mg/L
EC50, (48h), Daphnia magna, 331 mg/L
Trimethoxyvinylsilane, CAS: 2768-02-7
LC50, (96h), Oncorhynchus mykiss, 191 mg/l
EC50, (48h), Daphnia magna, 168,7 mg/l (92/69/EWG C.2)
EC50, Pseudokirchneriella subcapitata, 210 mg/l (7 d) (US-EPA)
EC10, Pseudomonas putida, 1000 mg/l (5 h)
Diocetylbinbis(acetylacetonate), CAS: 54068-28-9
EC50, (48h), Daphnia magna, 58,6 mg/l (OECD 202)
EC50, (96h), fish, 86 mg/l (OECD 203)
EC50, (24h), Scenedesmus subspicatus, 300 mg/l (OECD 201)
Bis(1,2,2,6,6-pentamethyl-4-piperidiny)-[(3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl)-methyl] butylmalonate, CAS: 63843-89-0
LC50, (96h), fish, > 100 mg/L
EC50, (72h), Algae, 61 mg/L
Pyrithione zinc, CAS: 13463-41-7
LC50, (96h), Brachidanio rerio, 0,0104 mg/l (OECD 203)
EC50, (72h), Pseudokirchneriella subcapitata, 0,051 mg/l (OECD 201)
EC50, (72h), Skeletonema costatum, 0,0013 mg/l (ISO 10253)
EC50, (48h), Daphnia magna, 0,051 mg/l (OECD 202)
NOEC, (96h), Pseudokirchneriella subcapitata, 0,00046 mg/l (ISO 10253)
NOEC, (21d), Daphnia magna, 0,0022 mg/l (OECD 211)
NOEC, (28d), Brachidanio rerio, 0,00125 mg/l (OECD 215)
NOEC, (72h), Pseudokirchneriella subcapitata, 0,0149 mg/l (OECD 201)

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

Does not contain a relevant substance that meets the classification criteria.

12.7 Other adverse effects

The product contains organically bound halogen in accordance with the formulation.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Ecotoxicological data are not available.
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Observe national and local legal requirements.
Coordinate disposal with the disposal contractor/authorities if necessary.

Waste no. (recommended)

080409*

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.

Waste no. (recommended)

150110* packaging containing residues of or contaminated by hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

Transport by land according to ADR/RID 3077

Inland navigation (ADN) 3077

Marine transport in accordance with IMDG 3077

Air transport in accordance with IATA 3077

14.2 UN proper shipping name

Transport by land according to ADR/RID Environmentally hazardous substance, solid, n.o.s. (Pyrithione zinc)

- Classification Code

M7

- Label



- ADR LQ

5 kg

- ADR 1.1.3.6 (8.6)

Transport category (tunnel restriction code) 3 (-)

Inland navigation (ADN)

Environmentally hazardous substance, solid, n.o.s. (Pyrithione zinc)

- Classification Code

M7

- Label



Marine transport in accordance with IMDG

Environmentally hazardous substance, solid, n.o.s. (Pyrithione zinc)

- EMS

F-A, S-F

- Label



- IMDG LQ

5 kg

Air transport in accordance with IATA

Environmentally hazardous substance, solid, n.o.s. (Pyrithione zinc)

- Label



14.3 Transport hazard class(es)

Transport by land according to ADR/RID 9 (N)

Inland navigation (ADN) 9 (N)

Marine transport in accordance with IMDG 9

Air transport in accordance with IATA 9

14.4 Packing group

Transport by land according to ADR/RID III

Inland navigation (ADN) III

Marine transport in accordance with IMDG III

Air transport in accordance with IATA III

14.5 Environmental hazards

Transport by land according to ADR/RID	yes
Inland navigation (ADN)	yes
Marine transport in accordance with IMDG	MARINE POLLUTANT
Air transport in accordance with IATA	yes

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Maritime transport in bulk according to IMO instruments

No information available.

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC; 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for young people.
- VOC (2010/75/CE)	<5,18%

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H372 Causes damage to organs through prolonged or repeated exposure.
H360D May damage the unborn child.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H301 Toxic if swallowed.
H410 Very toxic to aquatic life with long lasting effects.
H372 Causes damage to organs (lymph node) through prolonged or repeated exposure.
H302 Harmful if swallowed.
H371 May cause damage to organs. [Immune system; if swallowed]

H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform Chemical Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV@TWA = Threshold limit value – time-weighted average
TLV@STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure

Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Aquatic Acute 1: H400 Very toxic to aquatic life. (Calculation method)
Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. (Calculation method)

Modified position

SECTION 2 been added: Dioctyltinbis(acetylacetonate)
SECTION 3 been added: Pyrithione zinc
SECTION 3 deleted: Pyrithione zinc
SECTION 2 been added: Trimethoxyvinylsilane
SECTION 2 been added: environment
SECTION 2 been added: Contains no ingredients with endocrine-disrupting properties.
SECTION 2 been added: Skin Sens. 1
SECTION 2 been added: Aquatic Acute 1
SECTION 2 been added: H400 Very toxic to aquatic life.
SECTION 2 been added: P391 Collect spillage.
SECTION 2 been added: P261 Avoid breathing dust.
SECTION 2 been added: P333+P313 If skin irritation or rash occurs: Get medical advice / attention.
SECTION 2 been added: P362+P364 Take off contaminated clothing and wash it before reuse.
SECTION 2 deleted: P280 Wear eye protection / face protection.
SECTION 2 been added: P280 Wear protective gloves / eye protection / face protection.
SECTION 2 been added: H317 May cause an allergic skin reaction.
SECTION 4 been added: If skin irritation or rash occurs: Get medical advice/attention.
SECTION 4 deleted: Consult a doctor if skin irritation persists.
SECTION 5 been added: Collect contaminated firefighting water separately, must not be discharged into the drains.
SECTION 6 been added: Avoid release to the environment.
SECTION 6 been added: Use personal protective equipment.
SECTION 8 deleted: Not required under normal conditions.
SECTION 8 been added: Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)
SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.
SECTION 11 deleted:
SECTION 11 been added: May cause an allergic skin reaction.
SECTION 11 been added: Based on the available information, the classification criteria are fulfilled.
SECTION 11 deleted: No classification due to substance-specific concentration limits.
SECTION 11 deleted: Based on the available information, the classification criteria are not fulfilled.
SECTION 12 been added: Does not contain a relevant substance that meets the classification criteria.
SECTION 14 deleted: not classified as "Dangerous Goods"
SECTION 14 deleted: not classified as "Dangerous Goods"
SECTION 14 deleted: no dangerous goods
SECTION 15 been added: Observe employment restrictions for young people.
SECTION 15 deleted: no

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