SAFETY DATA SHEET

PRINTPERFEKT BLANC 670

Version	Revision Date:	Date of last issue: 17.10.2019
6.0	29.11.2022	Date of first issue: 27.02.2012

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

1.1 Product identifier

Trade name : PRINTPERFEKT BLANC 670

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

Use of the Substance/Mixture : Textile auxiliary

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier

CHT Germany GmbH
Bismarckstraße 102
72072 Tübingen
Germany
Tel.: +49 7071 154 0
info@cht.com

CHT Switzerland AG
Kriessernstrasse 20
9462 Montlingen
Switzerland
Tel.: +41 71 763 88 11
info.switzerland@cht.com

CHT UK Bridgwater Ltd.
Showground Road
Bridgwater TA6 6AJ
United Kingdom
Tel.: +44 1278 411 400
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Importer : -
-
-
-
-
-

Responsible Department : CHT Germany GmbH
CHT Switzerland AG
Product Safety
sds.germany@cht.com
sds.switzerland@cht.com

1.4 Emergency telephone number

Emergency telephone number : +1 703 527 3887 CHEMTREC (International, 24 hours)
+44 20 3807 3798 CHEMTREC (United Kingdom, 24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms :

Signal word : Warning

Hazard statements : H317 May cause an allergic skin reaction.

Precautionary statements :

Prevention:

P261 Avoid breathing mist or vapours.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

1,2-benzisothiazol-3(2H)-one
2-methyl-2H-isothiazol-3-one
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Additional Labelling

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Aqueous dispersion of acrylate, containing titanium dioxide

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Aryl ethylphenyl polyglycol ether	104376-75-2	Aquatic Chronic 3; H412	>= 1 - < 2.5
propylidynetrimethanol	77-99-6 201-074-9 01-2119486799-10	Repr. 2; H361fd	>= 0.1 - < 1
1,2-benzisothiazol-3(2H)-one	2634-33-5 220-120-9 613-088-00-6 01-2120761540-60	Acute Tox. 4; H302 Acute Tox. 2; H330 Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 _____ M-Factor (Acute aquatic toxicity): 1 _____ specific concentration limit Skin Sens. 1; H317 >= 0.05 %	>= 0.0025 - < 0.025
2-methyl-2H-isothiazol-3-one	2682-20-4 220-239-6 01-2120764690-50	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 _____	>= 0.0025 - < 0.025

		M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 _____ specific concentration limit Skin Sens. 1A; H317 >= 0.0015 %	
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9 613-167-00-5 01-2120764691-48	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 _____ M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100 _____ specific concentration limit Skin Corr. 1C; H314 >= 0.6 % Skin Irrit. 2; H315 0.06 - < 0.6 % Eye Irrit. 2; H319 0.06 - < 0.6 % Skin Sens. 1A; H317 >= 0.0015 % Eye Dam. 1; H318 >= 0.6 %	>= 0.0002 - < 0.0015
Substances with a workplace exposure limit :			
titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7 236-675-5 01-2119489379-17	Carc. 2; H351	>= 20 - < 30
propane-1,2-diol	57-55-6 200-338-0 01-2119456809-23		>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Take off all contaminated clothing immediately.
Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.
If symptoms persist, call a physician.

In case of skin contact : Wash off immediately with soap and plenty of water.
If skin irritation persists, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.
If symptoms persist, call a physician.

If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do NOT induce vomiting.
Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Risks : There may be reddening, swelling associated with itching on contact.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO2)
Water spray
Dry powder
Foam

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Can be released in case of fire:
Carbon oxides
Nitrogen oxides (NOx)
acrylic monomeres

5.3 Advice for firefighters

Special protective equipment for firefighters	:	In the event of fire, wear self-contained breathing apparatus.
Further information	:	In case of fire do not inhale smoke, conflagration gases and steams. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. The product itself does not burn. The residual polymer after volatilizing the watery phase is combustible.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	:	Use personal protective equipment. Contaminated surfaces will be extremely slippery.

6.2 Environmental precautions

Environmental precautions	:	The product should not be allowed to enter drains, water courses or the soil. Pay attention to local or official regulations.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Close drains (risk of blockage caused by polymer precipitation). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated surface thoroughly. Dispose of in accordance with local regulations.

6.4 Reference to other sections

Refer to protective measures listed in sections 7 and 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	Provide sufficient air exchange and/or exhaust in work rooms.
Advice on protection against fire and explosion	:	No special protective measures against fire required.
Hygiene measures	:	Avoid contact with skin, eyes and clothing. Do not breathe vapours, aerosols. Take off all contaminated clothing immediately. Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage	:	Do always store in containers which correspond to the original

areas and containers : ones. Keep container tightly closed. Inappropriate material for containers and conduit: Metals Suitable material for containers and conduit: Polyethylene

Further information on storage conditions : Protect from temperatures below + 5 °C. Protect from temperatures over + 40 °C. Stir well before use.

Advice on common storage : No special precautions required.

7.3 Specific end use(s)

Specific use(s) : Consult the technical guidelines for the use of this substance/mixture.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWA (Respirable dust)	4 mg/m3	GB EH40
propane-1,2-diol	57-55-6	TWA (particles)	10 mg/m3	GB EH40
	Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			
		TWA (Total vapour and particles)	150 ppm 474 mg/m3	GB EH40
	Further information: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure limit should be used.			

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
propylidynetrimethanol	Workers	Inhalation	Long-term systemic effects	3.3 mg/m3
	Workers	Skin contact	Long-term systemic effects	0.94 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	0.58 mg/m3
	Consumers	Skin contact	Long-term systemic effects	0.34 mg/kg bw/day
	Consumers	Ingestion	Long-term systemic effects	0.34 mg/kg bw/day
1,2-benzisothiazol-3(2H)-one	Workers	Inhalation	Long-term systemic effects	6.81 mg/m3
	Workers	Skin contact	Long-term systemic	0.966 mg/kg

			effects	bw/day
	Consumers	Inhalation	Long-term systemic effects	1.2 mg/m3
	Consumers	Skin contact	Long-term systemic effects	0.345 mg/kg bw/day
2-methyl-2H-isothiazol-3-one	Workers	Inhalation	Long-term local effects	0.021 mg/m3
	Workers	Inhalation	Acute local effects	0.043 mg/m3
	Consumers	Inhalation	Long-term local effects	0.021 mg/m3
	Consumers	Inhalation	Acute local effects	0.043 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.027 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	0.053 mg/kg bw/day
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Workers	Inhalation	Long-term local effects	0.02 mg/m3
	Workers	Inhalation	Acute local effects	0.04 mg/m3
	Consumers	Inhalation	Long-term local effects	0.02 mg/m3
	Consumers	Inhalation	Acute local effects	0.04 mg/m3
	Consumers	Ingestion	Long-term systemic effects	0.09 mg/kg bw/day
	Consumers	Ingestion	Acute systemic effects	0.11 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
1,2-benzisothiazol-3(2H)-one	Fresh water	4.03 µg/l
	Marine water	0.403 µg/l
	Intermittent use/release	1.1 µg/l
	STP	1.03 mg/l
	Fresh water sediment	49.9 µg/kg
	Marine sediment	4.99 µg/kg
	Soil	3 mg/kg dry weight (d.w.)
2-methyl-2H-isothiazol-3-one	Fresh water	3.39 µg/l
	Marine water	3.39 µg/l
	Intermittent use/release	3.39 µg/l
	STP	0.23 mg/l
	Soil	47.1 µg/kg
mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	Fresh water	3.39 µg/l
	Marine water	3.39 µg/l
	Intermittent use/release	3.39 µg/l
	Marine water	3.39 µg/l

	Remarks:Intermittent use/release	
	STP	0.23 mg/l
	Fresh water sediment	0.027 mg/kg dry weight (d.w.)
	Marine sediment	0.027 mg/kg dry weight (d.w.)
	Soil	0.01 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Solids with occupational exposure limits in liquid preparations do not cause an exposure in the workplace, because they are not present in a respirable form. Exposure can occur in the form of aerosols or after drying of the liquid the solids remain, possibly in a finely dispersed form.
Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eye protection : Goggles (EN 166)

Hand protection
- Material : Neoprene
- Break through time : > 480 min
- Glove thickness : > 0.5 mm
- Protective index : Class 6

Remarks : The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. The obtained break through times according to EN 374 Part III are not measured under normal operating conditions. Therefore a maximum usage time of 50% of the break through time is recommended.

Skin and body protection : Wear suitable protective clothing (EN 14605).

Respiratory protection : In case the work place is not ventilated sufficiently and during spray processing, it is necessary to wear respiratory protective equipment.
Recommended Filter type:
Combination filter A/P (EN 141)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : paste

Colour : white

Odour : characteristic

pH : 7.0 - 9.6 (20 °C)
(undiluted)

Melting point/range	:	ca. 0 °C
Boiling point/boiling range	:	ca. 100 °C
Flash point	:	Not applicable
Evaporation rate	:	Not applicable
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Vapour pressure	:	ca. 23 hPa (20 °C) Water
Relative vapour density	:	Not applicable
Density	:	ca. 1.3 g/cm3 (20 °C)
Solubility(ies)		
Water solubility	:	miscible
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	not determined
Decomposition temperature	:	The substance or mixture is not classified self-reactive.
Viscosity		
Viscosity, dynamic	:	52,000 - 63,000 mPa.s (20 °C) Brookfield RVT 20 rpm spindle 7
Viscosity, kinematic	:	not determined
Oxidizing properties	:	Not applicable

9.2 Other information

Flammability (liquids)	:	Does not sustain combustion.
Conductivity	:	Not determined
Particle Size Distribution	:	Not applicable
Self-ignition	:	not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Not applicable

10.5 Incompatible materials

Materials to avoid : Not applicable

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 2,000 mg/kg
Remarks: Argument by analogy

Components:

Aryl ethylphenyl polyglycol ether:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

propylidynetrimethanol:

Acute oral toxicity : LD50 (Rat, male): ca. 14,700 mg/kg

Acute inhalation toxicity : (Rat): 850 mg/m³
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 10,000 mg/kg

1,2-benzisothiazol-3(2H)-one:

Acute oral toxicity : LD50 (Rat, male and female): 490 mg/kg
Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50: > 0.05 - 0.5 mg/l
Exposure time: 4 h

Test atmosphere: dust/mist
Remarks: value stated in literature

Acute dermal toxicity : LD50 (Rat): > 2,000 mg/kg

2-methyl-2H-isothiazol-3-one:

Acute oral toxicity : LD50 (Rat, female): 120 mg/kg
Method: EPA Method

Acute inhalation toxicity : LC50 (Rat): 0.11 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Assessment: Corrosive to the respiratory tract.

Acute dermal toxicity : LD50 (Rat): 242 mg/kg
Method: OECD Test Guideline 402

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute oral toxicity : Acute toxicity estimate (Rat): 66 mg/kg
Method: Expert judgement

Acute inhalation toxicity : Acute toxicity estimate (Rat): 0.171 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Expert judgement

Acute dermal toxicity : Acute toxicity estimate (Rabbit): 87.12 mg/kg
Method: Expert judgement

titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]:

Acute inhalation toxicity : LC50 (Rat): 5.09 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Maximum attainable concentration

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat): 22,000 mg/kg

Skin corrosion/irritation

Product:

Remarks : Prolonged skin contact may cause skin irritation.

Components:

propylidynetrimethanol:

Species	:	Rabbit
Result	:	No skin irritation

1,2-benzisothiazol-3(2H)-one:

Result	:	Irritating to skin.

2-methyl-2H-isothiazol-3-one:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Causes burns.

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	Corrosive after 1 to 4 hours of exposure

titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

propane-1,2-diol:

Species	:	Rabbit
Method	:	OECD Test Guideline 404
Result	:	No skin irritation

Serious eye damage/eye irritation

Product:

Remarks	:	Contact with eyes may cause irritation.

Components:

propylidynetrimethanol:

Species	:	Rabbit
Result	:	No eye irritation

1,2-benzisothiazol-3(2H)-one:

Species	:	Rabbit
Result	:	Causes serious eye damage.

2-methyl-2H-isothiazol-3-one:

Species	:	Rabbit
Result	:	Risk of serious damage to eyes.

titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

propane-1,2-diol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	No eye irritation

Respiratory or skin sensitisation

Product:

Remarks	:	May cause an allergic skin reaction.

Components:

propylidynetrimethanol:

Species	:	Mouse
Method	:	OECD Test Guideline 429
Result	:	Did not cause sensitisation on laboratory animals.

1,2-benzisothiazol-3(2H)-one:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	May cause sensitisation by skin contact.

2-methyl-2H-isothiazol-3-one:

Result	:	The product is a skin sensitiser, sub-category 1A.

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Exposure routes	:	Dermal
Species	:	Guinea pig
Assessment	:	The product is a skin sensitiser, sub-category 1A.
Method	:	OECD Test Guideline 406
Result	:	May cause an allergic skin reaction.

titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]:

Species	:	Guinea pig
Method	:	OECD Test Guideline 429
Result	:	Did not cause sensitisation on laboratory animals.

propane-1,2-diol:

Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity

Product:

Germ cell mutagenicity- Assessment	:	Based on available data, the classification criteria are not met.
		Based on available data, the classification criteria are not met.

Components:

propane-1,2-diol:

Germ cell mutagenicity- Assessment	:	Did not show mutagenic effects in animal experiments., Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

Carcinogenicity

Product:

Carcinogenicity - Assessment	:	Based on available data, the classification criteria are not met.
		Based on available data, the classification criteria are not met.

Components:

propane-1,2-diol:

Carcinogenicity - Assessment	:	Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Product:

Reproductive toxicity - Assessment	:	Based on available data, the classification criteria are not met.
		Suspected of damaging fertility. Suspected of damaging the unborn child.

Components:

propylidynetrimethanol:

Reproductive toxicity - Assessment	:	Suspected of damaging fertility. Suspected of damaging the unborn child.

propane-1,2-diol:

Reproductive toxicity - Assessment	:	Animal testing did not show any effects on fertility. Did not show teratogenic effects in animal experiments.

STOT - single exposure

Product:

Remarks : Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks : Based on available data, the classification criteria are not met.

Aspiration toxicity

Product:

Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	Remarks: No data is available on the product itself.
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 500 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Argument by analogy
Toxicity to algae/aquatic plants	:	Remarks: No data is available on the product itself.
Toxicity to microorganisms	:	EC50 (activated sludge): > 1,000 mg/l Method: Retarded respiration test (OECD 209) Remarks: Argument by analogy

Components:

Aryl ethylphenyl polyglycol ether:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 10 - 100 mg/l Exposure time: 96 h

propylidynetrimethanol:

Toxicity to fish	:	LC50 (Fish): > 1,000 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 13,000 mg/l Exposure time: 48 h Test Type: static test Method: ASTM method
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (algae)): > 1,000 mg/l Exposure time: 72 h
Toxicity to microorganisms	:	EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

EC10 (activated sludge): > 1,000 mg/l
Exposure time: 3 h

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: > 1,000 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Test Type: static test

1,2-benzisothiazol-3(2H)-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2.15 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 2.9 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC10 (Selenastrum capricornutum (green algae)): 0.043 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

EC50 (Selenastrum capricornutum (green algae)): 0.11 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

M-Factor (Acute aquatic toxicity) : 1

Toxicity to microorganisms : EC50 (activated sludge): 12.8 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

2-methyl-2H-isothiazol-3-one:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4.77 mg/l
Exposure time: 96 h
Test Type: flow-through test
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 0.934 mg/l
Exposure time: 48 h
Test Type: flow-through test
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (green algae)): 0.22 mg/l
Exposure time: 120 h
Test Type: static test
Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.05 mg/l
Exposure time: 120 h

		Test Type: static test Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to microorganisms	:	EC50 (activated sludge): 41 mg/l Exposure time: 3 h Test Type: static test Method: OECD Test Guideline 209
Toxicity to fish (Chronic toxicity)	:	NOEC: 4.93 mg/l Exposure time: 98 d Species: Oncorhynchus mykiss (rainbow trout) Test Type: flow-through test Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.044 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: flow-through test Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	1

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Toxicity to fish	:	EC50 (Oncorhynchus mykiss (rainbow trout)): 0.22 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia (water flea)): 0.12 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOEC (Pseudokirchneriella subcapitata (green algae)): 0.0012 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 EC50 (Pseudokirchneriella subcapitata (green algae)): 0.048 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to microorganisms	:	EC20 (activated sludge): 0.97 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
Toxicity to fish (Chronic tox-	:	NOEC: 0.098 mg/l

icity)		Exposure time: 28 d Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0.004 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211
M-Factor (Chronic aquatic toxicity)	:	100

propane-1,2-diol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Ceriodaphnia dubia): 18,340 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 19,000 mg/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	NOEC (Pseudomonas putida): > 20,000 mg/l Exposure time: 18 h
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 13,020 mg/l Exposure time: 7 d Species: Ceriodaphnia dubia (water flea) Test Type: semi-static test

12.2 Persistence and degradability

Product:

Biodegradability	:	Test Type: DOC measuring Biodegradation: > 80 % Method: OECD 302 B (elimination) Remarks: The product is "inherently biodegradable" according to the criteria of the OECD. Argument by analogy
Physico-chemical removability	:	Remarks: Can be eliminated from water by precipitation.

Components:

Aryl ethylphenyl polyglycol ether:

Biodegradability	:	Result: Not readily biodegradable.

propylidynetrimethanol:

Biodegradability : Test Type: DOC measuring
Biodegradation: 6 %
Exposure time: 28 d
Method: OECD Test Guideline 301E

1,2-benzisothiazol-3(2H)-one:

Biodegradability : Result: rapidly degradable

2-methyl-2H-isothiazol-3-one:

Biodegradability : Test Type: CO2 measuring
Biodegradation: 47.6 - 55.8 %
Exposure time: 29 d
Method: OECD 301 B (mineralisation)

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradability : Test Type: O2 measuring
Result: Readily biodegradable.
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD 301 D (mineralisation)
Remarks: The product is "readily biodegradable" according to the criteria of the OECD.

Remarks: The 10 day time window criterion is not fulfilled.

propane-1,2-diol:

Biodegradability : Test Type: O2 measuring
Result: Readily biodegradable.
Biodegradation: > 81 %
Exposure time: 28 d
Method: OECD 301 F (mineralisation)

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Components:

propylidynetrimethanol:

Partition coefficient: n-octanol/water : log Pow: -0.47 (26 °C)

1,2-benzisothiazol-3(2H)-one:

Partition coefficient: n-octanol/water : log Pow: 0.70 (20 °C)

2-methyl-2H-isothiazol-3-one:

Bioaccumulation	:	Bioconcentration factor (BCF): 5.75
Partition coefficient: n-octanol/water	:	log Pow: 0.486 (20 °C) Method: OECD Test Guideline 117

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] an d 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1):

Partition coefficient: n-octanol/water	:	log Pow: 0.75 Remarks: Active ingredient

propane-1,2-diol:

Partition coefficient: n-octanol/water	:	log Pow: -1.07 (20.5 °C) Method: OECD Test Guideline 107

12.4 Mobility in soil

Product:

Mobility	:	Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Adsorbed organic bound halogens (AOX)	:	Remarks: The product does not increase the AOX-value of the waste water.
Additional ecological information	:	According to our knowledge, the product does not contain heavy metals and other compounds of EC directive 2000/60 EC.

Components:

titanium dioxide [containing 1 % or more of particles with aerodynamic diameter ≤ 10 µm]:

Additional ecological information	:	The product is insoluble in water, therefore the ecological data such as, e.g. biodegradability, COD, BOD5 values cannot be determined analytically.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	Pay attention to local or official regulations.

Contaminated packaging : Pay attention to local or official regulations.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : see chapter 6 - 8

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Remarks : Not applicable

SECTION 15: Regulatory information

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

Relevant EU provisions transposed through retained EU law

Other regulations:

15.2 Chemical safety assessment

not required

SECTION 16: Other information

Full text of H-Statements

H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H310	:	Fatal in contact with skin.
H311	:	Toxic 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.
H330	:	Fatal if inhaled.
H351	:	Suspected of causing cancer if inhaled.
H361fd	:	Suspected of damaging fertility. Suspected of damaging the

unborn child.

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.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Carc.	:	Carcinogenicity
Eye Dam.	:	Serious eye damage
Repr.	:	Reproductive toxicity
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Training advice	:	Based on the information in the safety data sheet and the workplace conditions, employees must be regularly trained in

the safe handling of the product. National rules for training employees in handling hazardous substances must be observed.

Other information : The classification for dangerous physico-chemical properties, health and environmental hazards has been derived from a combination of computational methods and, if available, test data.

This data sheet contains changes from the previous version in section(s):
2
3
5
11
12

Sources of key data used to compile the Safety Data Sheet : Information from our suppliers, as well as data from the "Registered substances database" of the European Chemicals Agency (ECHA) has been used to compile this safety data sheet.

Classification of the mixture:		**Classification procedure:**
Skin Sens. 1	H317	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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