SAFETY DATA SHEET
According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006

GRIFON SC

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	05.01.2023	50002750	Date of first issue: 05.01.2023

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

1.1 Product identifier

Product name GRIFON SC

Other means of identification

Product code 50002750

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

Use of the Substance/Mixture Fungicide

Recommended restrictions on use Use as recommended by the label.

1.3 Details of the supplier of the safety data sheet

Supplier Address

Cheminova Deutschland GmbH & Co. KG
Stader Elbstrasse 26
21683 Stade
Germany

Telephone: +49 (0) 4141 9204 0
Telefax: +45 (0) 4141 9204 206
E-mail address: datenblatt@fmc.com, SDS-Info@fmc.com .

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:
Germany: +49-69643508409 (CHEMTREC)
0800-181-7059 (CHEMTREC)

Medical emergency:
Germany: +49 (0) 551 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Cat-	H410: Very toxic to aquatic life with long lasting

egory 1 effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Warning

Hazard statements : H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : P102 Keep out of reach of children.
P103 Read carefully and follow all instructions.

Prevention:

P273 Avoid release to the environment.

Response:

P391 Collect spillage.

Disposal:

P501 Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

Additional Labelling

EUH208 Contains 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol. May produce an allergic reaction.

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

For special phrases (SP) and safety intervals, consult the label.

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.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
dicopper chloride trihydroxide	1332-65-6 215-572-9 029-017-00-1	Acute Tox. 3; H301 Acute Tox. 4; H332 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10 Acute toxicity estimate Acute oral toxicity: 299 mg/kg Acute inhalation toxicity (dust/mist): 2,83 mg/l	> 10 - <= 25
Copper hydroxide technical	24719-04-4	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 1 Acute toxicity estimate Acute oral toxicity: 489 mg/kg	> 10 - < 25
propane-1,2-diol	57-55-6 200-338-0		> 2,5 - <= 10
D-Glucopyranose, oligomers,	68515-73-1	Eye Dam. 1; H318	>= 1 - <= 2,5

decyl octyl glycosides	500-220-1		
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	4719-04-4 225-208-0 613-114-00-6	Acute Tox. 4; H302 Acute Tox. 2; H330 Eye Irrit. 2; H319 Skin Sens. 1; H317 STOT RE 1; H372 --- specific concentration limit Skin Sens. 1; H317 >= 0,1 % --- Acute toxicity estimate Acute oral toxicity: 1.000 mg/kg Acute inhalation toxicity (dust/mist): 0,338 mg/l	< 0,1

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.

If inhaled : Move to fresh air.
If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact : If on clothes, remove clothes.
If on skin, rinse well with water.
Wash off with soap and plenty of water.
Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.
Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Symptoms: Denaturation of proteins with damage to mucous membranes, liver and kidney damage and CNS damage, hemolysis. Vomiting with discharge of green colored material, gastroesophageal burning, bloody diarrhea, abdominal colic, hemolytic jaundice, liver and kidney failure, convulsions, collapse. Metal inhalation fever. Irritating to skin and eyes.
Therapy: symptomatic.
Warning: contact a poison information center.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Therapy: gastrolusis with lacto-protein solution, use chelating agents if cupremia is high, penicillamine if oral administration is practical or CaEDTA intravenously and BAL intramuscularly; otherwise symptomatic therapy.
Warnings: Contact a poison control center.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Thermal decomposition can lead to release of irritating gases and vapours.
Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
If it can be safely done, stop the leak.
Keep people away from and upwind of spill/leak.
Remove all sources of ignition.
Immediately evacuate personnel to safe areas.
Ensure adequate ventilation.
Never return spills in original containers for re-use.
Mark the contaminated area with signs and prevent access to unauthorized personnel.
Only qualified personnel equipped with suitable protective equipment may intervene.
For disposal considerations see section 13.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Hygiene measures : Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-

sealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.

Storage class (TRGS 510) : 10, Combustible liquids

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Registered pesticide to be used in accordance with a label approved by country-specific regulatory authorities.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
propane-1,2-diol	Workers	Inhalation	Long-term systemic effects	168 mg/m3
	Workers	Inhalation	Long-term local effects	10 mg/m3
	Consumers	Inhalation	Long-term systemic effects	50 mg/m3
	Consumers	Inhalation	Long-term local effects	10 mg/m3
D-Glucopyranose, oligomers, decyl octyl glycosides	Workers	Inhalation	Long-term systemic effects	420 mg/m3
	Workers	Dermal	Long-term systemic effects	595000 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	124 mg/m3
	Consumers	Dermal	Long-term systemic effects	357000 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	35,7 mg/kg bw/day
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Workers	Inhalation	Long-term systemic effects	0,2 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
propane-1,2-diol	Fresh water	260 mg/l
	Intermittent use/release	183 mg/l
	Marine water	26 mg/l
	Sewage treatment plant	20 g/l

	Fresh water sediment	572 mg/kg
	Marine sediment	57,2 mg/kg
	Soil	50 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	Fresh water	0,176 mg/l
	Marine water	0,0176 mg/l
	Fresh water sediment	1,516 mg/kg dry weight (d.w.)
	Marine sediment	0,152 mg/kg dry weight (d.w.)
	Soil	0,654 mg/kg dry weight (d.w.)
	Intermittent use (freshwater)	0,27 mg/l
	Oral	111,11 mg/kg
2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol	Fresh water	0,0066 mg/l
	Intermittent use/release	0,0066 mg/l
	Marine water	0,00066 mg/l
	Sewage treatment plant	5,5 mg/l
	Fresh water sediment	0,0304 mg/l
	Marine sediment	0,0304 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Protective measures : Plan first aid action before beginning work with this product.
Always have on hand a first-aid kit, together with proper instructions.
Wear suitable protective equipment.
When using do not eat, drink or smoke.
In the context of professional plant protection use as recommended, the end user must refer to the label and the instructions for use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	blue green
Odour	:	characteristic
Odour Threshold	:	not determined
Melting point/freezing point	:	not determined
Boiling point/boiling range	:	Not available for this mixture.
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Flash point	:	Not available for this mixture.
Decomposition temperature	:	not determined
pH	:	9 (20 °C)
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	not determined
Solubility(ies)		
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Vapour pressure	:	Not available for this mixture.
Density	:	1,365 g/cm3 (20 °C)
Relative vapour density	:	not determined
Particle characteristics		
Particle size	:	Not applicable
Particle Size Distribution	:	Not applicable
Shape	:	Not applicable

9.2 Other information

Explosives	:	Not explosive
Self-ignition	:	Not available for this mixture. not auto-flammable

SECTION 10: Stability and reactivity

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions	:	No decomposition if stored and applied as directed.

10.4 Conditions to avoid

Conditions to avoid	:	Heat, flames and sparks.

10.5 Incompatible materials

Materials to avoid	:	Avoid strong acids, bases, and oxidizers

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

SECTION 11: Toxicological information

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

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	:	LC50 (Rat): > 3,994 mg/l Exposure time: 4 h Test atmosphere: dust/mist Assessment: The substance or mixture has no acute inhalation toxicity Remarks: Highest attainable concentration.
Acute dermal toxicity	:	LD50 (Rabbit): > 2.000 mg/kg

Components:

dicopper chloride trihydroxide:

Acute oral toxicity : LD50 (Rat, male): 1.083 mg/kg
Method: OECD Test Guideline 401

Acute toxicity estimate: 299 mg/kg
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

LD50 (Rat, female): 950 mg/kg
Method: US EPA Test Guideline OPP 81-1

Acute inhalation toxicity : Acute toxicity estimate: 2,83 mg/l
Test atmosphere: dust/mist
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

LC50 (Rat, male): 2,83 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Fatality

LC50 (Rat, female): > 2,77 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403
Symptoms: Fatality

Acute dermal toxicity : LD50 (Rabbit, female): > 2.000 mg/kg
Method: US EPA Test Guideline OPP 81-2
Symptoms: Fatality

LD0 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402
Remarks: no mortality

Copper hydroxide technical:

Acute oral toxicity : LD50 (Rat, male and female): 489 mg/kg
Method: US EPA Test Guideline OPP 81-1

LD50 (Rat, male): 1.280 mg/kg
Method: US EPA Test Guideline OPP 81-1

Acute toxicity estimate: 489 mg/kg
Method: Calculation method

Acute inhalation toxicity : LC50: Exposure time: 4 h
Test atmosphere: dust/mist
Remarks: Not applicable (test not possible for fitness reasons)

Acute dermal toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402

propane-1,2-diol:

Acute oral toxicity : LD50 (Rat, male and female): 22.000 mg/kg

Acute inhalation toxicity : LC0 (Rabbit): 31,7 mg/l
Exposure time: 2 h
Test atmosphere: vapour
Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

D-Glucopyranose, oligomers, decyl octyl glycosides:

Acute oral toxicity : LD50 (Rat, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 423

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg
Method: OECD Test Guideline 402

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Acute oral toxicity : LD50 (Rat, male and female): 1.000 mg/kg
Method: OECD Test Guideline 401
Remarks: mortality

Acute toxicity estimate: 1.000 mg/kg
Method: Calculation method

Acute inhalation toxicity : LC50 (Rat, male and female): 0,371 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

LC50 (Rat, male): 0,4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

LC50 (Rat, female): 0,338 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: OECD Test Guideline 403

Acute toxicity estimate: 0,338 mg/l
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity : LD50 (Rat, male and female): > 4.000 mg/kg
Method: OECD Test Guideline 402
Remarks: no mortality

Skin corrosion/irritation

Not classified based on available information.

Components:

dicopper chloride trihydroxide:

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

Copper hydroxide technical:

Species	:	Rabbit
Remarks	:	May cause mild irritation. Minimal effects that do not meet the threshold for classification.

propane-1,2-diol:

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

D-Glucopyranose, oligomers, decyl octyl glycosides:

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

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

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

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Assessment	:	No eye irritation
Remarks	:	Based on available data, the classification criteria are not met.

Components:

dicopper chloride trihydroxide:

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

Copper hydroxide technical:

Assessment	:	Risk of serious damage to eyes.
Result	:	Irreversible effects on the eye

propane-1,2-diol:

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

D-Glucopyranose, oligomers, decyl octyl glycosides:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irreversible effects on the eye
Remarks	:	Based on data from similar materials

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Irritation to eyes, reversing within 21 days

Species	:	Bovine cornea
Method	:	OECD Test Guideline 437
Result	:	No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

dicopper chloride trihydroxide:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.

Copper hydroxide technical:

Species	:	Guinea pig
Assessment	:	Not a skin sensitizer.
Method	:	OECD Test Guideline 406

propane-1,2-diol:

Test Type	:	Maximisation Test
Species	:	Guinea pig
Result	:	negative

D-Glucopyranose, oligomers, decyl octyl glycosides:

Species	:	Guinea pig

Method	:	OECD Test Guideline 406
Result	:	Does not cause skin sensitisation.
Remarks	:	Based on data from similar materials

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Test Type	:	Open epicutaneous test
Exposure routes	:	Skin contact
Species	:	Guinea pig
Result	:	May cause sensitisation by skin contact.

Germ cell mutagenicity

Not classified based on available information.

Components:

dicopper chloride trihydroxide:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	:	Test Type: Micronucleus test Species: Mouse (male and female) Application Route: Oral Method: Mutagenicity (micronucleus test) Result: negative Test Type: DNA binding study Species: Rat (male) Application Route: Oral Result: negative
Germ cell mutagenicity- Assessment	:	Weight of evidence does not support classification as a germ cell mutagen.

Copper hydroxide technical:

Germ cell mutagenicity- Assessment	:	Animal testing did not show any mutagenic effects.

propane-1,2-diol:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Result: negative
Genotoxicity in vivo	:	Test Type: In vivo micronucleus test Species: Mouse Result: negative

D-Glucopyranose, oligomers, decyl octyl glycosides:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473 Result: negative

Remarks: Based on data from similar materials

Test Type: gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Germ cell mutagenicity- Assessment : Weight of evidence does not support classification as a germ cell mutagen.

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster fibroblasts
Method: OECD Test Guideline 473
Result: positive

Test Type: reverse mutation assay
Test system: Salmonella typhimurium
Method: OECD Test Guideline 471
Result: negative

Test Type: gene mutation test
Test system: Chinese hamster fibroblasts
Method: OECD Test Guideline 476
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Test system: Human lymphocytes
Method: OECD Test Guideline 487
Result: positive

Test Type: in vitro DNA damage and/or repair study
Test system: rat hepatocytes
Method: OPPTS 870.5500
Result: equivocal

Genotoxicity in vivo : Test Type: Micronucleus test
Species: Mouse (male)
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative

Test Type: unscheduled DNA synthesis assay
Species: Rat (male and female)
Application Route: Oral
Method: OECD Test Guideline 486
Result: negative

Germ cell mutagenicity- Assessment : Genetic damage in cultured mammalian cells was observed in some laboratory tests but not in others

Carcinogenicity

Not classified based on available information.

Components:

Copper hydroxide technical:

Species : Rat
Method : OECD Test Guideline 451
Result : negative

propane-1,2-diol:

Species : Rat
Application Route : Oral
Exposure time : 2 Years
Result : negative

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

Reproductive toxicity

Not classified based on available information.

Components:

dicopper chloride trihydroxide:

Effects on fertility : Test Type: Two-generation study
Species: Rat, male and female
Dose: 0, 100, 500, 1000, 1500 parts per million
General Toxicity - Parent: LOAEL: 1.500
General Toxicity F1: LOAEL: 1.500
General Toxicity F2: LOAEL: 1.500
Method: OECD Test Guideline 416
Result: negative

Effects on foetal development : Test Type: reproductive and developmental toxicity study
Species: Rat
Application Route: Oral
Dose: 0, 100, 500, 1000, 1500 parts per million
Duration of Single Treatment: 70 d
General Toxicity Maternal: LOAEL: 1.500 part per million

Embryo-foetal toxicity: LOAEL: 1.500 part per million
Method: OECD Test Guideline 416
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

Copper hydroxide technical:

Reproductive toxicity - Assessment : No toxicity to reproduction
Animal experiments showed mutagenic and teratogenic effects.

propane-1,2-diol:

Effects on fertility : Test Type: reproductive and developmental toxicity study
Species: Mouse
Application Route: Oral
Result: negative

Effects on foetal development : Test Type: Embryo-foetal development
Species: Mouse
Application Route: Oral
Method: OECD Test Guideline 414
Result: Animal testing did not show any effects on fertility.
Remarks: Based on data from similar materials

D-Glucopyranose, oligomers, decyl octyl glycosides:

Effects on fertility : Test Type: one-generation reproductive toxicity
Species: Rat, male and female
Application Route: Oral
Dose: 0, 100, 300, 1000 mg/kg bw
General Toxicity - Parent: NOAEL: 1.000 mg/kg bw/day
Method: OECD Test Guideline 421
Result: negative
Remarks: Based on data from similar materials

Effects on foetal development : Species: Rat, females
Application Route: Oral
Dose: 0, 100, 300, 1000 mg/kg bw
General Toxicity Maternal: NOAEL: 1.000 mg/kg bw/day
Developmental Toxicity: NOAEL: 1.000 mg/kg bw/day
Method: OECD Test Guideline 414
Result: negative
Remarks: Based on data from similar materials

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Effects on foetal development : Species: Rabbit
Application Route: Oral

Dose: 20, 60, 180 mg/kg bw/day
General Toxicity Maternal: NOAEL: 60 mg/kg bw/day
Embryo-foetal toxicity: NOAEL: 60 mg/kg bw/day
Method: OECD Test Guideline 414
Result: negative

Species: Rat
Application Route: Oral
Dose: 250, 500, 750 mg/kg bw/day
General Toxicity Maternal: NOAEL: 500 mg/kg bw/day
Embryo-foetal toxicity: NOAEL: > 750 mg/kg bw/day
Method: OPPTS 870.3700
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

STOT - single exposure

Not classified based on available information.

Components:

dicopper chloride trihydroxide:

Assessment : The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Not classified based on available information.

Components:

D-Glucopyranose, oligomers, decyl octyl glycosides:

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Assessment : Causes damage to organs through prolonged or repeated exposure.
Remarks : Refer to repeated dose toxicity data for more information on target organs if applicable.

Repeated dose toxicity

Components:

dicopper chloride trihydroxide:

Species : Rat, male and female
NOAEL : 1000 ppm
LOAEL : 2000 ppm
Application Route : Oral - feed

Exposure time	:	92 d
Dose	:	0,500,1000,2000,4000,8000 ppm
Species	:	Rat, male and female
NOAEL	:	>= 2 mg/m3
Application Route	:	Inhalation
Test atmosphere	:	dust/mist
Exposure time	:	28 d
Dose	:	0.2,0.4,0.8,2 mg/m3
Method	:	OECD Test Guideline 412

propane-1,2-diol:

Species	:	Rat, male and female
NOAEL	:	1.700 mg/kg
Application Route	:	Oral
Exposure time	:	2 Years
Species	:	Rat, male and female
NOAEL	:	1.000 mg/kg
LOAEL	:	160 mg/kg
Application Route	:	Inhalation
Exposure time	:	90 Days

D-Glucopyranose, oligomers, decyl octyl glycosides:

Species	:	Rat, male and female
NOAEL	:	1000 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	90d
Dose	:	0, 250, 500, 1000 mg/kg bw
Remarks	:	Based on data from similar materials

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Species	:	Rat, male
NOAEL	:	64 mg/kg bw/day
LOAEL	:	285 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	3 months
Dose	:	14, 64, 285 mg/kg bw/day
Method	:	OECD Test Guideline 408
Species	:	Rat, female
NOAEL	:	91 mg/kg bw/day
LOAEL	:	339 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	3 months
Dose	:	21, 91, 339 mg/kg bw/day
Method	:	OECD Test Guideline 408
Species	:	Rat, male and female
NOAEL	:	0,03 mg/l
LOAEL	:	0,05 mg/l

Application Route	:	Inhalation
Test atmosphere	:	dust/mist
Exposure time	:	4 weeks
Dose	:	0.003, 0.01, 0.03, 0.05 mg/L
Method	:	OECD Test Guideline 412

Aspiration toxicity

Not classified based on available information.

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

Remarks : No data available

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 12.2 mg Cu/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 101 µ/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Desmodesmus subspicatus (green algae)): 157.98 µg Cu/l Exposure time: 72 h Method: OECD Test Guideline 201 EyC50 (Desmodesmus subspicatus (green algae)): 38.27 µg Cu/l Exposure time: 72 h Method: OECD Test Guideline 201
Toxicity to fish (Chronic toxicity)	:	NOEC: 0,4 mg Cu/l Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 38.5 µ/l Exposure time: 48 h Species: Daphnia magna (Water flea)
Toxicity to soil dwelling organisms	:	LC50: >1000 mg Cu/kg soil dry weight Species: worms
Toxicity to terrestrial organisms	:	LD50: 18.6 µg AI/bee Exposure time: 24 h End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213 LD50: > 100 µg AI/bee Exposure time: 24 h End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 213 LD50: 15.6 µg AI/bee Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 214 LD50: > 100 µg AI/bee Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) Method: OECD Test Guideline 214

Ecotoxicology Assessment

Acute aquatic toxicity	:	Very toxic to aquatic life.
Chronic aquatic toxicity	:	Very toxic to aquatic life with long lasting effects.

Components:

dicopper chloride trihydroxide:

Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): 0,0384 mg/l Exposure time: 96 h Test Type: flow-through test Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,0338 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 LC50 (Ceriodaphnia dubia (water flea)): 0,014 mg/l Exposure time: 48 h Test Type: semi-static test

Toxicity to algae/aquatic plants	:	NOEC (Phaeodactylum tricornutum): 0,0057 mg/l Exposure time: 72 h Method: ISO 10253 NOEC (Raphidocelis subcapitata (freshwater green alga)): 0,0157 mg/l Exposure time: 72 h Test Type: static test EC50 (Chlamydomonas reinhardtii (green algae)): 0,047 mg/l Exposure time: 96 h Method: OECD Test Guideline 201 NOEC (Pseudokirchneriella subcapitata (algae)): 0,0194 mg/l Exposure time: 72 h Test Type: static test NOEC (Skeletonema costatum (Diatom)): 0,00754 mg/l Exposure time: 72 h Test Type: static test NOEC (Chlamydomonas reinhardtii (green algae)): 0,022 mg/l Exposure time: 10 d Test Type: flow-through test NOEC (Lemna minor (duckweed)): 0,030 mg/l Exposure time: 7 d Test Type: static test
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to microorganisms	:	EC50 (Bacteria): 0,025 mg/l Exposure time: 100 d NOEC (Tetrahymena pyriformis): 3,563 mg/l Exposure time: 48 h Test Type: Growth inhibition NOEC (activated sludge): 0,26 - 0,29 mg/l Exposure time: 30 d Test Type: Respiration inhibition
M-Factor (Chronic aquatic toxicity)	:	10
Toxicity to soil dwelling organisms	:	NOEC: 25 mg/kg Exposure time: 6 Weeks Species: worms
Toxicity to terrestrial organisms	:	LD50: 1.400 mg/kg Exposure time: 14 d Species: Colinus virginianus (Bobwhite quail)

Copper hydroxide technical:

Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0,0422 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	ErC50 (Selenastrum capricornutum (green algae)): 22,5 mg/l Exposure time: 96 h Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	:	10
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 0,04153 mg/l Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202
M-Factor (Chronic aquatic toxicity)	:	1
Toxicity to terrestrial organisms	:	LD50: 223 mg/kg Species: Colinius virginianus Method: US EPA Test Guideline OPP 71-1 LD50: 556 mg/kg Species: Coturnix japonica (Japanese quail) Method: US EPA Test Guideline OPP 71-1 LC50: 333 mg/kg Species: Coturnix japonica (Japanese quail) Method: US EPA Test Guideline OPP 71-1 NOEL: 29,5 mg/kg Species: Coturnix japonica (Japanese quail) Method: US EPA Test Guideline OPP 71-1 LD50: 42,8 µg p.a./Affe Exposure time: 48 h End point: Acute contact toxicity Species: Apis mellifera (bees) Method: US EPA Test Guideline OPP 141-1 LD50: 49 µg p.a./Affe Exposure time: 48 h End point: Acute oral toxicity Species: Apis mellifera (bees) Method: OEPP/EPPO Test Guideline 170 LD50: > 57 µg p.a./Affe Exposure time: 48 h End point: Acute contact toxicity

Species: Apis mellifera (bees)
Method: OEPP/EPPO Test Guideline 170

propane-1,2-diol:

Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 40.613 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	(Mysidopsis bahia (opossum shrimp)): 18.800 mg/l Exposure time: 96 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 34.100 mg/l Exposure time: 48 h Method: OECD Test Guideline 201
Toxicity to microorganisms	:	EC50 (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

D-Glucopyranose, oligomers, decyl octyl glycosides:

Toxicity to fish	:	LC0 (Danio rerio (zebra fish)): 59,3 mg/l Exposure time: 96 h Test Type: semi-static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 21 mg/l Exposure time: 72 h Test Type: static test
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 560 mg/l Exposure time: 6 h Test Type: Growth inhibition
Toxicity to fish (Chronic toxicity)	:	NOEC: 1,8 mg/l Exposure time: 28 d Species: Danio rerio (zebra fish) Method: OECD Test Guideline 204 Remarks: Based on data from similar materials
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	LOEC: 2 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Test Type: semi-static test Method: OECD Test Guideline 202 Remarks: Based on data from similar materials

Toxicity to soil dwelling organisms	:	LC0: >= 654 mg/kg Exposure time: 14 d Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207 Remarks: Based on data from similar materials

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 16,07 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 11,9 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	NOEC (Desmodesmus subspicatus (green algae)): 1,56 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 EC50 (Desmodesmus subspicatus (green algae)): 6,66 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 EC50 (Skeletonema costatum (marine diatom)): 21 mg/l Exposure time: 72 h Test Type: static test Method: ISO 10253 NOEC (Skeletonema costatum (marine diatom)): 10 mg/l Exposure time: 72 h Test Type: static test Method: ISO 10253
Toxicity to microorganisms	:	EC50 (activated sludge): 550 mg/l Exposure time: 30 min Method: OECD Test Guideline 209

12.2 Persistence and degradability

Product:

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

Components:

dicopper chloride trihydroxide:

Biodegradability	:	Remarks: Not readily biodegradable.

Copper hydroxide technical:

Biodegradability : Remarks: Not readily biodegradable.

propane-1,2-diol:

Biodegradability : Result: Readily biodegradable.
Biodegradation: 23,6 %
Exposure time: 64 d
Method: OECD Test Guideline 306

D-Glucopyranose, oligomers, decyl octyl glycosides:

Biodegradability : Inoculum: activated sludge, non-adapted
Result: Readily biodegradable.
Method: OECD Test Guideline 301E

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Biodegradability : Test Type: aerobic
Inoculum: activated sludge, non-adapted
Result: Readily biodegradable.
Biodegradation: > 90 - 100 %
Exposure time: 8 d
Method: OECD Test Guideline 301A

12.3 Bioaccumulative potential

Product:

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

Components:

dicopper chloride trihydroxide:

Bioaccumulation : Remarks: Not applicable due to the insolubility of the salt.

Copper hydroxide technical:

Bioaccumulation : Remarks: Not applicable due to the insolubility of the salt.

propane-1,2-diol:

Partition coefficient: n-octanol/water : log Pow: -1,07

D-Glucopyranose, oligomers, decyl octyl glycosides:

Partition coefficient: n-octanol/water : log Pow: 1,72 (40 °C)
pH: 6,5
Remarks: Based on data from similar materials

2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water	:	log Pow: -2,3 (24 °C) pH: 5 log Pow: -2 (24 °C) pH: 7 log Pow: -1,3 (24 °C) pH: 9

12.4 Mobility in soil

Product:

Distribution among environmental compartments	:	Remarks: No data is available on the product itself.

Components:

dicopper chloride trihydroxide:

Distribution among environmental compartments	:	Remarks: Low mobility in soil

Copper hydroxide technical:

Distribution among environmental compartments	:	Remarks: Low mobility in soil

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 Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	:	The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.
Contaminated packaging	:	Empty remaining contents. Do not re-use empty containers. Packaging that is not properly emptied must be disposed of as the unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number or ID number

ADN	:	UN 3082
ADR	:	UN 3082
RID	:	UN 3082
IMDG	:	UN 3082
IATA	:	UN 3082

14.2 UN proper shipping name

ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper chloride trihydroxide, 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper chloride trihydroxide, 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper chloride trihydroxide, 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (dicopper chloride trihydroxide, 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)
IATA	:	Environmentally hazardous substance, liquid, n.o.s. (dicopper chloride trihydroxide, 2,2',2''-(hexahydro-1,3,5-triazine-1,3,5-triyl)triethanol)

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADN	:	9	
ADR	:	9	
RID	:	9	
IMDG	:	9	
IATA	:	9	

14.4 Packing group

ADN

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9

ADR

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)

RID

Packing group	:	III
Classification Code	:	M6
Hazard Identification Number	:	90
Labels	:	9

IMDG

Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F

IATA (Cargo)

Packing instruction (cargo aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

IATA (Passenger)

Packing instruction (passenger aircraft)	:	964
Packing instruction (LQ)	:	Y964
Packing group	:	III
Labels	:	Miscellaneous

14.5 Environmental hazards

ADN

Environmentally hazardous	:	yes

ADR

Environmentally hazardous : yes

RID
Environmentally hazardous : yes

IMDG
Marine pollutant : yes

IATA (Passenger)
Environmentally hazardous : yes

IATA (Cargo)
Environmentally hazardous : yes

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: Number on list 3
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	:	Not applicable
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.	E1	ENVIRONMENTAL HAZARDS

Water hazard class (Germa- : WGK 3 highly hazardous to water

ny)		Classification according to AwSV, Annex 1 (5.2)
TA Luft List (Germany)	:	5.2.1 Total dust: Not applicable 5.2.2 Inorganic substances in powdered form: Not applicable 5.2.4 Inorganic substances in gaseous form: Not applicable 5.2.5 Organic Substances: Not applicable 5.2.7.1.1 Carcinogenic substance: Not applicable 5.2.7.1.1 Quartz fine dust PM4: Not applicable 5.2.7.1.1 Formaldehyde: Not applicable 5.2.7.1.2 Germ cell mutagens: Not applicable 5.2.7.1.3 Substances toxic to reproduction: Not applicable 5.2.7.2 Poorly degradable, easily enrichable and highly toxic organic substances: Not applicable

The components of this product are reported in the following inventories:

TCSI	:	Not in compliance with the inventory
TSCA	:	Product contains substance(s) not listed on TSCA inventory.
AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL. Copper hydroxide technical
ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Full text of H-Statements

H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.
H330	:	Fatal if inhaled.
H332	:	Harmful if inhaled.
H372	:	Causes damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure

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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Aquatic Acute 1	H400	Based on product data or assessment
Aquatic Chronic 1	H410	Based on product data or assessment

Disclaimer
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Prepared by

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