SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name
Pure Zym

Product code
[v.3.0], A30693, A30176, A30177, A30178, A30472, A31467, A31581

UFI:
KNSV-DCPY-N007-FVM0

https://my.chemius.net/p/0vTejt/en/pd/en

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

Relevant identified uses
Soil improver

Uses advised against
Do not use for purposes other than those prescribed.

1.3 Details of the supplier of the safety data sheet

Supplier
Bertels B.V.
Ommelpad 2
6035 PC Ospel, The Netherlands
31 (0)495 63 15 59
info@bertelsholland.com

1.4 Emergency Telephone Number

Emergency
111

Supplier
31 (0)495 63 15 59

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)
Resp. Sens. 1; H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2 Label elements

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

Signal word: DANGER

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
P102 Keep out of reach of children.
P261 Avoid breathing vapours/spray.
P284 Wear respiratory protection.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

P501 Dispose of contents/container in accordance with national regulation.

Contains:

cellulase
Xylanase, endo-1,4-
Glucanase, endo-1,3(4)-β-
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2.3 Other hazards

PBT/vPvB

The substances in the product are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Endocrine disrupting properties

The mixture does not contain substance(s) included in the list established in accordance with Article 59 of REACH for having endocrine disrupting properties, or substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

Additional information

No information.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
cellulase	9012-54-8 232-734-4 647-002-00-3	2.5-5	Resp. Sens. 1; H334	/	/
Xylanase, endo-1,4-	9025-57-4 232-800-2 - 01-2120747946-38	0.1-1	Resp. Sens. 1; H334	/	/
Glucanase, endo-1,3(4)-β-	62213-14-3 263-462-4 -	0.1-1	Resp. Sens. 1; H334	/	/
bronopol (INN)	52-51-7 200-143-0 603-085-00-8	0.01-0.1	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 Aquatic Acute 1; H400; M = 10	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9 611-341-5 613-167-00-5	<0.01	Acute Tox. 3; H301 Acute Tox. 2; H310 Skin Corr. 1C; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400; M = 100 Aquatic Chronic 1; H410; M = 100 EUH071	Skin Corr. 1C; H314; C ≥ 0.6% Skin Irrit. 2; H315; 0.06% ≤ C < 0.6% Skin Sens. 1A; H317; C ≥ 0.0015% Eye Dam. 1; H318; C ≥ 0.6% Eye Irrit. 2; H319; 0.06% ≤ C < 0.6%	B

Notes for substances

B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid … %". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician. No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing with water before removing or use gloves.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. Seek medical help immediately.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water. If symptoms develop and persist, seek medical attention.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Consult a physician. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Following skin contact

Contact with skin may cause irritation (redness, itching). May cause sensitisation by skin contact (itching, redness, rashes).

Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

Following ingestion

May cause nausea/vomiting and diarrhea. May cause abdominal discomfort.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam. Product itself is not flammable.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Cool containers at risk with water spray. If possible remove containers from endangered area.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (BS EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (BS EN 137).

Additional information

Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No action shall be taken involving any personal risk or without suitable training. Prevent access to unprotected personnel. Evacuate the danger zone. Do not breathe vapour or mist. Avoid contact with skin, eyes and clothing.

For emergency responders

Use personal protective equipment.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment

Stem the spill if this does not pose risks.

For cleaning up

Small amounts <1L: dilute with water, then clean with a sponge or collect using absorbent, inert material, and collect in an appropriate container. Clean contaminated area with plenty of water. Prevent release into the sewer, water, basements or confined areas.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

The usual measures for preventive fire protection.

Measures to prevent aerosol and dust generation

Ensure adequate ventilation.

Measures to protect the environment

Avoid release to the environment.

Other measures

No information.

Advice on general occupational hygiene

Keep out of reach of children. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Remove contaminated clothes and wash them before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in a cool, dry and well ventilated place. Protect from open fire, heat and direct sunlight. Keep away from food, drink and animal feeding stuffs.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage temperature

5 - 35 °C

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

See identified uses in Section 1.2.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

Name	mg/m³	ml/m³	Short-term value mg/m³	Short-term value ml/m³	Remark	Biological Tolerance Values
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.05	/	/	/	8 h	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	Value
cellulase	Worker	inhalation	long term local effects	/	60 mg/m³
cellulase	Consumer	inhalation	long term local effects	/	15 mg/m³

Name	Type	Exposure route	exp. frequency	Remark	Value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Worker	inhalation	long term local effects	/	0.02 mg/m^3
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Worker	inhalation	short term local effects	/	0.04 mg/m³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	inhalation	long term local effects	/	0.02 mg/m³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	inhalation	short term local effects	/	0.04 mg/m³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	oral	long term systemic effects	/	0.09 mg/kg bw/day
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	oral	short term systemic effects	/	0.11 mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	Value
cellulase	fresh water	/	27.3 µg/l
cellulase	water, intermittent release	fresh water	273 µg/l
cellulase	marine water	/	2.73 µg/l
cellulase	water, intermittent release	marine water	27.3 µg/l
cellulase	water treatment plant	/	65 mg/L
cellulase	soil	dry weight	3.26 mg/kg
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	fresh water	/	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water, intermittent release	fresh water	3.39 µg/L
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	marine water	/	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water, intermittent release	marine water	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water treatment plant	/	0.23 mg/L

Name	Exposure route	Remark	Value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	fresh water sediment	dry weight	0.027 mg/kg
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	marine water sediment	dry weight	0.027 mg/kg
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	soil	dry weight	0.01 mg/kg

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses
Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/aerosols.

Structural measures to prevent exposure
No information.

Organisational measures to prevent exposure
No information.

Technical measures to prevent exposure
Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

Personal protective equipment

Eye and face protection
No requirements under normal use conditions. If there is risk of splashing into eyes, wear safety glasses with side shields (BS EN ISO 16321-1:2022).

Hand protection
No requirements under normal use conditions. In case of prolonged exposure, wear protective gloves (BS EN ISO 374).

Appropriate materials

Skin protection
No requirements under normal use conditions. With excessive exposure wear protective working clothing (overalls and boots). Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022).

Respiratory protection
In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (BS EN 136) with filter A2-P2 (BS EN 14387).

Thermal hazards
No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure
The product is not classified as dangerous for the environment.

Instruction measures to prevent exposure
No information.

Organisational measures to prevent exposure
No information.

Technical measures to prevent exposure
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Important health, safety and environmental information

Physical state	liquid
Shape	No information.
Colour	yellow brown
Odour	characteristic
Odour threshold	No information.
Melting/freezing point or softening point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	4.4 — 4.8 at 20 °C, conc. 100 %
Viscosity	No information.
Solubility (Water)	Completely soluble
Partition coefficient n-octanol/water (log value)	No information.
Vapour pressure	No information.
Density	1.11 — 1.13 kg/L
Relative vapour/gas density	No information.
Particle characteristics	No information.

9.2 Other information

Information with regard to physical hazard classes

No information.

Other safety characteristics

No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The product is not reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

There are no known hazardous reactions.

10.4 Conditions to avoid

No special precautions required. Consider the directions for use and storage.

10.5 Incompatible materials

No information.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION

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

(a) Acute toxicity

For components

Name	Exposure route	Type	Species	Time	Value	Method	Remark
cellulase	oral	LD_{50}	rat	/	> 2880 mg/kg	/	/
cellulase	inhalation	LC_{50}	rat	4 h	> 4 mg/l	/	/
Xylanase, endo-1,4-	oral	LD_{50}	rat	/	5000 mg/kg	/	/
Glucanase, endo-1,3(4)-β-	oral	LD_{50}	rat	/	5000 mg/kg	/	/
bronopol (INN)	oral	LD_{50}	rat	/	211 mg/kg	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	oral	LD_{50}	rat	/	ca. 3310 mg/kg	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	dermal	LD_{50}	rabbit	/	> 5000 mg/kg	/	/

Additional information

The product is not classified as acutely toxic.

(b) Skin corrosion/irritation

For components

Name	Species	Time	result	Method	Remark
cellulase	/	/	not irritating	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	4 h	/	/	/

Additional information

The product is not classified as irritating to the skin.

(c) Serious eye damage/irritation

For components

Name	Exposure route	Species	Time	result	Method	Remark
cellulase	/	/	/	not irritating	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	rabbit	/	Corrosive.	/	/

Additional information

The product is not classified as an irritant to the eyes.

(d) Respiratory or skin sensitisation

For components

Name	Exposure route	Species	Time	result	Method	Remark
cellulase	inhalation	/	/	May cause sensitisation by inhalation.	/	/

Name	Exposure route	Species	Time	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	dermal	/	/	May cause sensitisation by skin contact.	/	/

Additional information

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

(e) (Germ cell) mutagenicity

For components

Name	Type	Species	Time	result	Method	Remark
cellulase	in-vivo mutagenicity	Bacteria	/	Negative.	OECD 471	/
cellulase	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	OECD 473	/
Xylanase, endo-1,4-	in-vitro mutagenicity	Bacteria	/	Negative.	/	/
Glucanase, endo-1,3(4)-β-	in-vitro mutagenicity	Bacteria	/	Negative.	OECD 471	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	Not mutagenic.	/	/

(f) Carcinogenicity

For components

Name	Exposure route	Type	Species	Time	Value	result	Method	Remark
cellulase	/	/	/	/	/	Not carcinogenic.	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	/	/	Not carcinogenic.	/	/

(g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	Value	result	Method	Remark
cellulase	/	/	/	/	/	not teratogenic	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	/	/	Not toxic for reproduction.	/	/

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	Value	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	inhalation	/	/	/	/	/	/	Negative.	/	/

Additional information

STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	Value	result	Method	Remark
cellulase	oral	NOAEL	rodents	90 days	/	/	1000 mg/kg bw/day	/	OECD 408	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	inhalation	-	/	/	/	/	/	Excessive exposure may cause irritation of the upper respiratory tract (nose and throat).	/	/

Additional information

STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

For components

Name	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	During ingestion or vomiting, inhalation into the lungs may occur, which can cause tissue damage or lung injury.	/	/

Additional information

Aspiration hazard: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards

Endocrine disrupting properties

For product

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

For components

Name	Type	Value	Exposure time	Species	organism	Method	Remark
cellulase	EC_{50}	> 100 mg/L	72 h	algae	*Pseudokirchneriella subcapitata*	/	/
cellulase	NOEC	≥ 100 mg/L	72 h	algae	*Pseudokirchneriella subcapitata*	/	/

Name	Type	Value	Exposure time	Species	organism	Method	Remark
cellulase	LC_{50}	> 100 mg/L	96 h	fish	*Oncorhynchus mykiss*	/	/
cellulase	NOEC	45.5 mg/L	96 h	fish	*Oncorhynchus mykiss*	/	/
cellulase	EC_{50}	> 100 mg/L	48 h	daphnia	/	/	/
cellulase	NOEC	≥ 100 mg/L	48 h	daphnia	/	/	/

Chronic (long-term) toxicity

No information.

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

No information.

Biodegradation

For components

Name	Type	Rate	Time	Evaluation	Method	Remark
cellulase	biodegradability	> 70 %	6 days	readily biodegradable	/	/
Xylanase, endo-1,4-	-	/	/	readily biodegradable	/	/
Glucanase, endo-1,3(4)-β-	-	/	/	readily biodegradable	/	/

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)

For components

Name	Value	Temperature °C	pH	Concentration	Method
cellulase	-1.3	/	/	/	/

Bioconcentration factor (BCF)

No information.

Additional information

No bioaccumulation potential.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

The components in this product do not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties

For product

The mixture does not contain substance(s) included in the list established in accordance with Article 59 of REACH for having endocrine disrupting properties, or substance(s) identified as having endocrine disrupting properties in

accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7 Other adverse effects

No information.

12.8 Additional information

For product

Product is not classified as dangerous for environment. Do not allow to reach ground water, water courses or sewage system. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

For components

cellulase

Does not bioaccumulate.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Do not allow product to reach drains/sewage systems. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

16 03 06 - organic wastes other than those mentioned in 160305

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 02 - plastic packaging

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.
14.2 UN proper shipping name			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.3 Transport hazard class(es)			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
NO	NO	NO	NO

ADR/RID	IMDG	IATA	ADN
14.6 Special precautions for user			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
14.7 Maritime transport in bulk according to IMO instruments			
	Not given/not applicable		

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents
No information.

Special instructions
No information.

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes
2.2 Label elements 8.2 Exposure controls 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 12.2 Persistence and degradability

Key literature references and sources for data
No information.

Abbreviations and acronyms
ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals (Regulation (EC) No 1907/2006)
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H310 Fatal in contact with skin.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.