

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 Issue date: 08/10/2021 Revision date: 17/10/2022 Supersedes version of: 08/10/2021 Version: 2.0

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

1.1. Product identifier

Product form	:	Mixture
Product name	:	Biotector
Product code	:	FB

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

1.2.1. Relevant identified uses

Use of the substance/mixture Function or use category

Cleaning/washing agents and additivesCleaning/washing agents and additives

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Freedom Hygiene 46 Main Street Buckminster NG33 5SA Grantham – Linconshire England T 07774 898904 paul@freedomhygiene.co.uk

1.4. Emergency telephone number

Emergency number

: 07774 898904

SECTION 2: Hazards identification	
2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 1	H318
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) N	o. 1272/2008 [CLP]
Hazard pictograms (CLP)	
	GHS05
Signal word (CLP)	: Danger
Contains	 Cetyl Trimethyl Ammonium Chloride, Hydrogen Peroxide Solution, amines, c12-14- alkyldimethyl, n-oxides
Hazard statements (CLP)	 H315 - Causes skin irritation. H318 - Causes serious eye damage. H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP)	 P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear protective gloves, eye protection. P302+P352 - IF ON SKIN: Wash with plenty of water.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332+P313 - If skin irritation occurs: Get medical advice/attention.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrogen Peroxide Solution	CAS-No.: 7722-84-1 EC-No.: 231-765-0 EC Index-No.: 008-003-00-9 REACH-no: 01-2119485845- 22	≥5-<10	Ox. Liq. 1, H271 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412
Cetyl Trimethyl Ammonium Chloride	CAS-No.: 112-02-7 EC-No.: 203-928-6 REACH-no: 01-2119970558- 23	≥1-<5	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410
amines, c12-14-alkyldimethyl, n-oxides	CAS-No.: 308062-28-4 EC-No.: 931-292-6 REACH-no: 01-2119490061- 47	≥1-<5	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 2, H411
Phosphoric acid substance with a Community workplace exposure limit	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924- 24	≥ 0.1 – < 1	Skin Corr. 1B, H314

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
Hydrogen Peroxide Solution	CAS-No.: 7722-84-1 EC-No.: 231-765-0 EC Index-No.: 008-003-00-9 REACH-no: 01-2119485845- 22	($5 \le C < 8$) Eye Irrit. 2, H319 ($8 \le C < 50$) Eye Dam. 1, H318 ($35 \le C < 100$) STOT SE 3, H335 ($35 \le C < 50$) Skin Irrit. 2, H315 ($50 \le C < 70$) Ox. Liq. 2, H272 ($50 \le C < 70$) Skin Corr. 1B, H314 ($70 \le C < 100$) Ox. Liq. 1, H271 ($70 \le C < 100$) Skin Corr. 1A, H314	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Specific concentration limits:			
Name	Product identifier	Specific concentration limits	
Phosphoric acid	CAS-No.: 7664-38-2 EC-No.: 231-633-2 EC Index-No.: 015-011-00-6 REACH-no: 01-2119485924- 24	(10 ≤C < 25) Skin Irrit. 2, H315 (10 ≤C < 25) Eye Irrit. 2, H319 (25 ≤C < 100) Skin Corr. 1B, H314	

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures	
4.1. Description of first aid measures	i de la constante de la constan
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after skin contact Symptoms/effects after eye contact	: Irritation. : Serious damage to eyes.

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	: Water spray. Dry powder. Foam. Carbon dioxide.
5.2. Special hazards arising from the subs	tance or mixture
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures			
6.1. Personal precautions, protective equipment and emergency procedures			
6.1.1. For non-emergency personnel Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.		
6.1.2. For emergency responders Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".		
6.2. Environmental precautions			
Avoid release to the environment.			
6.3. Methods and material for containment and cleaning up			
Methods for cleaning up	: Take up liquid spill into absorbent material.		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage	ge
7.1. Precautions for safe handling	
Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.
7.3. Specific end use(s)	

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Phosphoric acid (7664-38-2)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	Orthophosphoric acid	
IOEL TWA	1 mg/m³	
IOEL STEL	2 mg/m ³	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	Orthophosphoric acid	
WEL TWA (OEL TWA) [1]	1 mg/m ³	
WEL STEL (OEL STEL)	2 mg/m ³	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Cetyl Trimethyl Ammonium Chloride (112-02-7)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal 4.7 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	3.32 mg/m ³	
DNEL/DMEL (General population)		
Long-term - systemic effects,oral 2.83 mg/kg bodyweight/day		

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Cetyl Trimethyl Ammonium Chloride (112-02-7)		
Long-term - systemic effects, inhalation 0.98 mg/m ³		
Long-term - systemic effects, dermal	2.83 mg/kg bodyweight/day	
PNEC (Water)		
PNEC aqua (freshwater)	0.00068 mg/l	
PNEC aqua (marine water)	0.000068 mg/l	
PNEC aqua (intermittent, freshwater)	0.0008 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	9.27 mg/kg dwt	
PNEC sediment (marine water)	0.927 mg/kg dwt	
PNEC (Soil)		
PNEC soil	7 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	0.4 mg/l	
Hydrogen Peroxide Solution (7722-84-1)		
DNEL/DMEL (Workers)		
Acute - local effects, inhalation	3 mg/m ³	
Long-term - local effects, inhalation	1.4 mg/m³	
DNEL/DMEL (General population)		
Acute - local effects, inhalation	1.93 mg/m³	
Long-term - local effects, inhalation	0.21 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0.0126 mg/l	
PNEC aqua (marine water)	0.0126 mg/l	
PNEC aqua (intermittent, freshwater)	0.0138 mg/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	0.047 mg/kg dwt	
PNEC sediment (marine water)	0.047 mg/kg dwt	
PNEC (Soil)		
PNEC soil	0.0023 mg/kg dwt	
PNEC (STP)		
PNEC sewage treatment plant	4.66 mg/l	
8.1.5. Control banding		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection: Safety glasses

8.2.2.2. Skin protection

Hand protection: Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

No respiratory protection needed under normal use conditions

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties		
9.1. Information on basic physical and ch	emical properties	
Physical state	: Liquid	
Appearance	: Viscous. Clear liquid.	
Colour	: red.	
Ddour	: slight.	
Ddour threshold	: •	
	-	
ЪН	: 5.1	
Relative evaporation rate (butylacetate=1)	: -	
Relative evaporation rate (ether=1)	: -	
Aelting point	:-	
Freezing point	: •	
Boiling point	: ≥ 100 °C	
Flash point	: Not flammable	
Auto-ignition temperature	: •	
Decomposition temperature	:-	
Flammability (solid, gas)	: Not applicable	
/apour pressure	: •	
/apour pressure at 50 °C	:•	
Relative vapour density at 20 °C	: •	
Relative density	:•	
Density	: 1.03 g/ml	
Solubility	: Miscible.	
Partition coefficient n-octanol/water (Log Pow)	: -	
Partition coefficient n-octanol/water (Log Kow)	: -	
/iscosity, kinematic	: •	
/iscosity, dynamic	: •	
Explosive properties	: Not explosive.	
Dxidising properties	: Not oxidising.	
Explosive limits	: •	
ower explosive limit (LEL)	:-	

Upper explosive limit (UEL)

: -

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information		
11.1 Information on toxicological effects		
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	: Not classified : Not classified : Not classified	
Hydrogen Peroxide Solution (7722-84-1)		
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:US EPA Toxic Substance Health Effects Test Guidelines (PB82-232984, 1982), Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	
amines, c12-14-alkyldimethyl, n-oxides ((308062-28-4)	
LD50 oral rat	1064 mg/kg	
Skin corrosion/irritation	: Causes skin irritation. pH: 5.1	
amines, c12-14-alkyldimethyl, n-oxides ((308062-28-4)	
рН	Approx. 7	
Serious eye damage/irritation	: Causes serious eye damage. pH: 5.1	
amines, c12-14-alkyldimethyl, n-oxides ((308062-28-4)	
рН	Approx. 7	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
STOT-single exposure	: Not classified	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Hydrogen Peroxide Solution (7722-84-1)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure :	Not classified	
Cetyl Trimethyl Ammonium Chloride (112-02-	7)	
LOAEL (dermal, rat/rabbit, 90 days)	Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28- Day Study)	
NOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28- Day Oral Toxicity in Rodents)	
Phosphoric acid (7664-38-2)		
NOAEL (oral, rat, 90 days)	250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
Aspiration hazard :	Not classified	
Biotector		
Viscosity, kinematic	-	

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Hazardous to the aquatic environment, short–term (acute) Hazardous to the aquatic environment, long–term	 Harmful to aquatic life with long lasting effects. Not classified Harmful to aquatic life with long lasting effects.
(chronic)	
Cetyl Trimethyl Ammonium Chloride (112-02	?-7)
LC50 - Fish [1]	0.59 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	0.19 – 0.29 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	280 μg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	≈ 0.09 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.08 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.05 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	0.11 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	0.18 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Hydrogen Peroxide Solution (7722-84-1)	
LC50 - Fish [1]	16.4 mg/l Test organisms (species): Pimephales promelas
EC50 72h - Algae [1]	1.38 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	1.25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.63 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Phosphoric acid (7664-38-2)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Phosphoric acid (7664-3	38-2)			
EC50 72h - Algae [1]		> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)		
amines, c12-14-alkyldim	ethyl, n-oxides (3080	62-28-4)		
LC50 - Fish [1]		2.67 mg/l		
EC50 - Other aquatic organis	sms [1]	3.1 mg/l		
12.2. Persistence and de	gradability			
Biotector				
Persistence and degradability The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States ar will be made available to them, at their direct request or at the request of a detergent manufacturer.			rgents. Data to support this s of the Member States and	
12.3. Bioaccumulative p	otential			
Biotector				
Partition coefficient n-octano	l/water (Log Pow)	-		
Partition coefficient n-octano	l/water (Log Kow)	-		
12.4. Mobility in soil		1		
No additional information avail	ilable			
12.5. Results of PBT and	l vPvB assessment			
No additional information avai	ilable			
12.6. Other adverse effe	cts			
No additional information avail				
SECTION 13: Disposa	l considerations			
13.1. Waste treatment m	ethods			
Waste treatment methods	:	Dispose of contents/container in	accordance with licensed coll	ector's sorting instructions.
SECTION 14: Transpo	rt information			
In accordance with ADR / IME				
ADR	IMDG	ΙΑΤΑ	ADN	RID
14.1. UN number				I
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippin			1	I
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard o			1	1
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				I
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

ADR	IMDG	ΙΑΤΑ	ADN	RID
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea Not regulated

Air transport

Not regulated

Inland waterway transport Not regulated

Rail transport

Not regulated

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

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors) **ANNEX I RESTRICTED EXPLOSIVES PRECURSORS**

List of substances which shall not be made available to, or introduced, possessed or used by, members of the general public, whether on their own or in mixtures or substances that include those substances, unless the concentration is equal to or lower than the limit values set out in column 2, and for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Name	CAS-No.	Limit value	Upper limit value for licensing under Article 5(3)	Combined Nomenclature (CN) code for a separate chemically defined compound meeting the requirements of Note 1 to Chapter 28 or 29 of the CN, respectively	code for mixture without
Hydrogen peroxide	7722-84-1	12 % w/w	35% w/w	2847 00 00	ex 3824 99 96

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

Chemical Safety Assessment not required

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Abbreviations and ac	Abbreviations and acronyms:	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	
CAS-No.	Chemical Abstract Service number	
N.O.S.	Not Otherwise Specified	
vPvB	Very Persistent and Very Bioaccumulative	
ED	Endocrine disrupting properties	

Full text of H- and EUH-statements:		
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2	
H271	May cause fire or explosion; strong oxidiser.	
H272	May intensify fire; oxidiser.	
H302	Harmful if swallowed.	
H311	Toxic in contact with skin.	
H314	Causes severe skin burns and eye damage.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H319	Causes serious eye irritation.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
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.	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Full text of H- and EUH-statements:	
H412	Harmful to aquatic life with long lasting effects.
Ox. Liq. 1	Oxidising Liquids, Category 1
Ox. Liq. 2	Oxidising Liquids, Category 2
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.