



Safety Data Sheet dated 3/7/2020, version 20

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

1.1. Product identifier

Mixture identification:

Trade name: BIODUE

Trade code: 860202018PP

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

Identified use:

Bio-oxidant with modulated release

Uses advised against:

Any other use different from the identified one.

1.3. Details of the supplier of the safety data sheet

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it


1.4. Emergency telephone number


Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture


EC regulation criteria n°1272/2008 (CLP)

 Warning, Acute Tox. 4, Harmful if swallowed.

 Danger, Skin Corr. 1A, Causes severe skin burns and eye damage.

 Danger, Eye Dam. 1, Causes serious eye damage.

 Warning, STOT SE 3, May cause respiratory irritation.

 Aquatic Chronic 2, Toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



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Danger

Hazard statements:

- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H335 May cause respiratory irritation.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353+P310 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Immediately call a POISON CENTER/doctor/...
- P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor/...
- P391 Collect spillage.
- P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

- PACK1 The packing must be featured by a safety lock for children.
- PACK2 The packing must have tactile indications of danger for blind people.

Contains

- peracetic acid 15 %
- hydrogen peroxide solution 35 %

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards









SECTION 3: Composition/information on ingredients

3.1. Substances








N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
40 %	hydrogen peroxide solution 35 %	Index number: 008-003-00-9 CAS: 7722-84-1 EC: 231-765-0 REACH No.: 01-2119485845-22	 2.13/1 Ox. Liq. 1 H271  2.6/2 Flam. Liq. 2 H225  3.1/4/Inhal Acute Tox. 4 H332  3.1/4/Oral Acute Tox. 4 H302  3.8/3 STOT SE 3 H335  4.1/C3 Aquatic Chronic 3 H412
>= 10% - < 20%	peracetic acid 15 %	Index number: 607-094-00-8 CAS: 79-21-0	 2.15/D Org. Perox. D H242  2.6/3 Flam. Liq. 3 H226

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		EC: 201-186-8 REACH No.: 01-2119531330-56	 3.1/3/Oral Acute Tox. 3 H301  3.1/4/Dermal Acute Tox. 4 H312  3.1/4/Inhal Acute Tox. 4 H332  3.2/1A Skin Corr. 1A H314  3.8/3 STOT SE 3 H335  4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410
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SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

After contact with skin, wash immediately with soap and plenty of water.

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

If breathing is irregular or stopped, administer artificial respiration.

4.2. Most important symptoms and effects, both acute and delayed

Contact with the skin produces redness, burning and pain.

After contact with the eyes produces redness and pain.

Ingestion causes severe irritation or chemical burns in the mouth, throat, esophagus and stomach.

4.3. Indication of any immediate medical attention and special treatment needed

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

If swallowed, seek immediate medical attention. Do not induce vomiting to the danger of perforation. Keep the patient at rest.

In case of contact with eyes, rinse immediately with water and seek medical advice.

After contact with skin, wash immediately with plenty of soap and water.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

None in particular.

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

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Burning produces heavy smoke.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate the surrounding areas.

Remove persons to safety.

Prevent entry of foreign and unprotected personnel.

Do not touch or walk on spilled material.

Provide adequate ventilation.

Avoid breathing vapors or mists.

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.3. Methods and material for containment and cleaning up

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

For containment:

Anything in particular

For cleaning up:

Wash with plenty of water.

Other information:

None

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Advice on general occupational hygiene:

Do not eat or drink while working.

Keep away from combustible material and avoid contact with organic material

Store at room temperature and away from direct sunlight

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature and away from direct sunlight.

Keep away from combustible material and avoid contact with organic material.

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Keep away from food, drink and feed.
Incompatible materials:
None in particular.
Instructions as regards storage premises:
Cool and adequately ventilated.

- 7.3. Specific end use(s)
See section 1.2.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

hydrogen peroxide solution 35 % - CAS: 7722-84-1
ACGIH - TWA(8h): 1 ppm - Notes: A3 - Eye, URT, and skin irr
peracetic acid 15 % - CAS: 79-21-0
ACGIH - STEL: 0.4 ppm - Notes: (IFV), A4 - URT, eye, and skin irr

DNEL Exposure Limit Values

hydrogen peroxide solution 35 % - CAS: 7722-84-1
Worker Professional: 1.4 03 - Consumer: 0.21 03 - Exposure: Human Inhalation -
Frequency: Long Term, local effects - Endpoint: Irritation (respiratory tract)
Worker Professional: 3 03 - Consumer: 1.93 03 - Exposure: Human Inhalation -
Frequency: Short Term, local effects - Endpoint: Irritation (respiratory tract)
peracetic acid 15 % - CAS: 79-21-0
Worker Professional: 0.6 03 - Consumer: 0.6 03 - Exposure: Human Inhalation -
Frequency: Long Term, systemic effects
Worker Professional: 0.6 03 - Consumer: 0.6 03 - Exposure: Human Inhalation -
Frequency: Short Term, systemic effects
Worker Professional: 0.6 03 - Consumer: 0.6 03 - Exposure: Human Inhalation -
Frequency: Long Term, local effects
Worker Professional: 0.6 03 - Consumer: 0.3 03 - Exposure: Human Inhalation -
Frequency: Short Term, local effects

PNEC Exposure Limit Values

hydrogen peroxide solution 35 % - CAS: 7722-84-1
Target: Fresh Water - Value: 0.0126 mg/l
Target: Marine water - Value: 0.0126 mg/l
Target: Microorganisms in sewage treatments - Value: 4.66 mg/l
Target: Freshwater sediments - Value: 0.047 mg/kg
Target: Marine water sediments - Value: 0.047 mg/kg
peracetic acid 15 % - CAS: 79-21-0
Target: Fresh Water - Value: 0.000224 mg/l
Target: Microorganisms in sewage treatments - Value: 0.0510 mg/l
Target: Soil (agricultural) - Value: 0.320 mg/kg

8.2. Exposure controls

Eye/face protection:

Eye glasses with side protection. EN166

Protection for skin:

Clothing resistant to corrosive products CLASS I, EN 340

Protection for hands:

Gloves resistant to chemicals. EN 374

Respiratory protection:

Not necessary in normal use.

Thermal Hazards:

Not applicable (the product is handled at room temperature)

Environmental exposure controls:

Do not allow the product to be absorbed from the soil or from entering waterways or sewers.
Do not let product enter drains. Discharge into the environment must be avoided.

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Appropriate engineering controls:
 Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.
 Predict the presence of showers and eye wash fountains at the workplace.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Colorless liquid	--	--
Odour:	Acre	--	--
Odour threshold:	Not Relevant	--	--
pH:	1	--	--
Melting point / freezing point:	NA	--	--
Initial boiling point and boiling range:	Not Relevant	--	--
Flash point:	Not flammable item	--	--
Evaporation rate:	NA	--	--
Solid/gas flammability:	Not flammable item	--	--
Upper/lower flammability or explosive limits:	Not flammable item	--	--
Vapour pressure:	Not Relevant	--	--
Vapour density:	Not Relevant	--	--
Relative density:	1.08 Kg/l	--	--
Solubility in water:	Complete	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient (n-octanol/water):	Not Relevant	--	--
Auto-ignition temperature:	Not Relevant	--	--
Decomposition temperature:	Not Relevant	--	--
Viscosity:	Not Relevant	--	--
Explosive properties:	Non explosive item	--	--
Oxidizing properties:	Not Relevant	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	Complete	--	--
Fat Solubility:	Not Relevant	--	--
Conductivity:	Not Relevant	--	--
Substance Groups relevant properties	Not Relevant	--	--

SECTION 10: Stability and reactivity

- 10.1. Reactivity
The product is not pyrophoric.
- 10.2. Chemical stability
Stable under recommended storage and handling. Please refer to section 7 of the MSDS.
- 10.3. Possibility of hazardous reactions
In presence of metals.
- 10.4. Conditions to avoid
Keep away from heat sources.
Avoid direct sunlight.
Avoid contact with organic material.
- 10.5. Incompatible materials
concentrated alkali.
Products containing chlorine.
organic substances.
- 10.6. Hazardous decomposition products
Oxygen.
Methane
ketene

SECTION 11: Toxicological information

- 11.1. Information on toxicological effects
Toxicological information of the product:
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 - a) acute toxicity
The product is classified: Acute Tox. 4 H302
 - b) skin corrosion/irritation
The product is classified: Skin Corr. 1A H314
 - c) serious eye damage/irritation
The product is classified: Eye Dam. 1 H318
 - d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
 - e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
 - f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
 - g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
 - h) STOT-single exposure
The product is classified: STOT SE 3 H335
 - i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
 - j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:
hydrogen peroxide solution 35 % - CAS: 7722-84-1
- a) acute toxicity:

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- Test: LD50 - Route: Oral - Species: Rat = 800 mg/kg - Source: STUDY REPORT 1981 (ECHA) - Notes: OECD GUIDELINE 401 (ACUTE ORAL TOXICITY)
Test: LC50 - Route: Inhalation - Species: Rat > 0.17 mg/l - Duration: 4h - Notes: LINEE GUIDA 403 PER IL TEST DELL'OECD
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg - Source: STUDY REPORT 1983 (ECHA) - Notes: US EPA GUIDELINES FOR ACUTE DERMAL TOXICITY
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes - Source: STUDY REPORT 1990 (ECHA) - Notes: OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION / CORROSION)
- c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Yes - Source: STUDY REPORT 1985 (ECHA) - Notes: OECD GUIDELINE 405 (ACUTE EYE IRRITATION / CORROSION)
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: .porc No - Source: STUDY REPORT 1953 (ECHA) - Notes: SKIN SENSITIZATION TEST
- h) STOT-single exposure:
Test: Respiratory Tract Irritant Yes - Source: ECHA
- peracetic acid 15 % - CAS: 79-21-0
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Rat > 1000 mg/kg - Source: (PAA 15%) - Notes: OECD GUID. 401
Test: LC50 - Route: Inhalation - Species: Rat > 500 mg/m³ - Duration: 4h - Source: (PAA 15%) - Notes: EPA OPP 81-3 (ACUTE INHALATION TOXICITY)
Test: LD50 - Route: Skin - Species: Rabbit > 1900 mg/kg - Source: (PAA 12%) - Notes: EPA OPP 81-2 (ACUTE DERMAL TOXICITY)
- b) skin corrosion/irritation:
Test: Skin Corrosive - Route: Skin - Species: Rabbit Yes - Source: STUDY REPORT 1982 (ECHA) - Notes: OECD GUIDELINE 404 (ACUTE DERMAL IRRITATION / CORROSION), IN VIVO.
- c) serious eye damage/irritation:
Test: Eye Corrosive - Species: Rabbit Yes - Source: STUDY REPORT 1983 (ECHA) - Notes: EPA TOXIC SUBSTANCES HEALTH EFFECTS TEST GUIDELINES (PB82-232984)
- d) respiratory or skin sensitisation:
Test: Skin Sensitization - Species: .porc Negative - Source: STUDY REPORT 2000 (ECHA) - Notes: EU METHOD B.6 (SKIN SENSITISATION)
- e) germ cell mutagenicity:
Test: Mutagenesis No - Source: BUSCHINI, A 2004 (ECHA) - Notes: OECD GUIDELINE 481 (GENETIC TOXICOLOGY: SACCHAROMYCES CEREVISIAE, MITOTIC RECOMB)
- h) STOT-single exposure:
Test: Respiratory Tract Irritant Yes
- peracetic acid 15 % - CAS: 79-21-0
LD50 (RAT) ORAL: 1540 MG/KG
LD50 (RABBIT) SKIN: 1410 MG/KG

SECTION 12: Ecological information

12.1. Toxicity

No information is available on the mixture as a whole. This is the information on ecotoxicological effects of the individual components.

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The product is classified: Aquatic Chronic 2 - H411
hydrogen peroxide solution 35 % - CAS: 7722-84-1

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 16.4 mg/l - Duration h: 96 - Notes: ECHA

Endpoint: LC50 - Species: Daphnia = 2.4 mg/l - Duration h: 48 - Notes: ECHA

Endpoint: EC50 - Species: Algae = 1.38 mg/l - Duration h: 72 - Notes: ECHA

b) Aquatic chronic toxicity:

Endpoint: NOEC - Species: aquatic invertebrates = 0.63 mg/l - Duration h: 504 - Notes: ECHA

Endpoint: EC50 - Species: activated sludge = 466 mg/l - Duration h: 0.5 - Notes: ECHA

peracetic acid 15 % - CAS: 79-21-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 0.53 mg/l - Duration h: 96 - Notes: ECHA

Endpoint: EC50 - Species: Algae = 0.16 mg/l - Duration h: 72 - Notes: ECHA (PAA 5%)

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 3265

IATA-UN Number: 3265

IMDG-UN Number: 3265

14.2. UN proper shipping name

ADR-Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (hydrogen peroxide solution 35 %, peracetic acid 15 %)

IATA-Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (hydrogen peroxide solution 35 %, peracetic acid 15 %)

IMDG-Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (hydrogen peroxide solution 35 %, peracetic acid 15 %)

14.3. Transport hazard class(es)

ADR-Class: 8

ADR - Hazard identification number: 88

IATA-Class: 8

IATA-Label: 8

IMDG-Class: 8

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- 14.4. Packing group
ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
ADR-Subsidiary hazards: -
ADR-S.P.: 274
ADR-Transport category (Tunnel restriction code): 1 (E)
IATA-Passenger Aircraft: 850
IATA-Subsidiary hazards: -
IATA-Cargo Aircraft: 854
IATA-S.P.: A3 A803
IATA-ERG: 8L
IMDG-EmS: F-A , S-B
IMDG-Subsidiary hazards: -
IMDG-Stowage and handling: Category B SW2
IMDG-Segregation: -
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830
Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restriction 40

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

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Provisions related to directive EU 2012/18 (Seveso III):
Seveso III category according to Annex 1, part 1
Product belongs to category: E2

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.
Substances for which a Chemical Safety Assessment has been carried out:
None

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

H271 May cause fire or explosion; strong oxidiser.
H225 Highly flammable liquid and vapour.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.
H242 Heating may cause a fire.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Ox. Liq. 1	2.13/1	Oxidising liquid, Category 1
Org. Perox. D	2.15/D	Organic peroxide, Type D
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 3	3.1/3/Oral	Acute toxicity (oral), Category 3
Acute Tox. 4	3.1/4/Dermal	Acute toxicity (dermal), Category 4
Acute Tox. 4	3.1/4/Inhal	Acute toxicity (inhalation), Category 4
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1
Aquatic Chronic 1	4.1/C1	Chronic (long term) aquatic hazard, category 1
Aquatic Chronic 2	4.1/C2	Chronic (long term) aquatic hazard, category 2
Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure

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Acute Tox. 4, H302	Calculation method
Skin Corr. 1A, H314	On basis of test data (pH)
Eye Dam. 1, H318	On basis of test data (pH)
STOT SE 3, H335	Calculation method
Aquatic Chronic 2, H411	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.