ALBILEX-3000-A

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

1.1. Product identifier

Trade name/designation:

ALBILEX-3000-A

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

Use of the substance/mixture:

Industrial uses

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

ALBILEX GmbH & Co. KG
Achtzehnmorgenweg 3
61250 Usingen
Telephone: +49-6081-10400
Telefax: +49-6081-104040
E-mail: info@albilex.de
Website: www.albilex.de

1.4. Emergency telephone number

+49-6081-10400 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) *(Acute Tox. 4)*	H302: Harmful if swallowed.	
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
STOT-single exposure *(STOT SE 3)*	H335: May cause respiratory irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 1)*	H410: Very toxic to aquatic life with long lasting effects.	

2.2. Label elements

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

Hazard pictograms:

GHS05
Corrosion

GHS07
Exclamation mark

GHS09
Environment

Signal word: Danger

hazard statements for health hazards	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

Hazard statements for environmental hazards	
H410	Very toxic to aquatic life with long lasting effects.

Supplemental Hazard information (EU): -

Precautionary statements Prevention	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response	
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor/.../ if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/....
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P321	Specific treatment (see ... on this label).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.

Precautionary statements Storage	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary statements Disposal	
P501	Dispose of contents/container to ....

2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 7722-84-1 **EC No.:** 231-765-0 **REACH No.:** 01-2119485845-22-XXXX	**hydrogen peroxide** Skin Corr. 1A, STOT SE 3, Ox. Liq. 1, Acute Tox. 4  **Danger** H271-H302-H314-H332-H335	5 – ≤ 20 Wt %

Full text of H- and EUH-phrases: see section 16.

ALBILEX-3000-A

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:
Provide fresh air. In case of respiratory tract irritation, consult a physician. Get medical advice/attention if you feel unwell.

In case of skin contact:
After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. Get immediate medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion:
Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Get immediate medical advice/attention.

Self-protection of the first aider:
Use personal protection equipment. No direct artificial respiration to be given by first aider.

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

Skin corrosion/irritation, Serious eye damage/eye irritation, Irritation to respiratory tract

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

Treat symptomatically. Gas embolie possible after drinking

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray jet

Unsuitable extinguishing media:
Extinguishing powder, Carbon dioxide (CO_2)

5.2. Special hazards arising from the substance or mixture

Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. Oxidising properties: Oxygen

Hazardous combustion products:
In case of fire: Gases/vapours, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Remove persons to safety. Use personal protection equipment.

Protective equipment:
Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Pump away bigger amounts. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Wash with plenty of water. Never return spills in original containers for re-use.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination. Do not dispose of as domestic waste. Small amounts (several grams) can be given to the sewage system after dilution 1:100 with water. Bigger amounts must be treated as special waste.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Put lids on containers immediately after use. Do not keep the container sealed.

Fire prevent measures:

Heating causes rise in pressure with risk of bursting. Do not keep the container sealed.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Container should not be closed gas-tight. Suitable container/equipment material: Polyethylene, Polypropylene

Hints on storage assembly:

Do not store together with: Combustible substance

Further information on storage conditions:

Protect against: Light, Keep in a cool, well-ventilated place.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
DFG (DE)	hydrogen peroxide CAS No.: 7722-84-1	① 0.5 ppm (0.71 mg/m³) ② 0.5 ppm (0.71 mg/m³)

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
hydrogen peroxide CAS No.: 7722-84-1	3 mg/m³	① DNEL worker ② DNEL acute inhalative (local)
hydrogen peroxide CAS No.: 7722-84-1	1.93 mg/m³	① DNEL Consumer ② DNEL acute inhalative (local)
hydrogen peroxide CAS No.: 7722-84-1	1.4 mg/m³	① DNEL worker ② DNEL long-term inhalative (local)
hydrogen peroxide CAS No.: 7722-84-1	0.21 mg/m³	① DNEL Consumer ② DNEL long-term inhalative (local)

Substance name	PNEC Value	① PNEC type
hydrogen peroxide CAS No.: 7722-84-1	0.0126 mg/l	① PNEC aquatic, freshwater
hydrogen peroxide CAS No.: 7722-84-1	0.0126 mg/l	① PNEC aquatic, marine water
hydrogen peroxide CAS No.: 7722-84-1	0.0138 mg/l	① PNEC aquatic, intermittent release
hydrogen peroxide CAS No.: 7722-84-1	0.047 mg/kg	① PNEC sediment, freshwater
hydrogen peroxide CAS No.: 7722-84-1	0.047 mg/kg	① PNEC sediment, marine water
hydrogen peroxide CAS No.: 7722-84-1	0.0023 mg/kg	① PNEC soil, freshwater
hydrogen peroxide CAS No.: 7722-84-1	4.66 mg/l	① PNEC sewage treatment plant (STP)

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection DIN EN 166

Skin protection:

Tested protective gloves must be worn DIN EN 374 Suitable material: NR (natural rubber, natural latex), Butyl caoutchouc (butyl rubber), Thickness of the glove material: 0,65 mm; 0,4 mm; 0,7 mm. Breakthrough time (maximum wearing time) min 8h. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Respiratory protection:

Suitable respiratory protection apparatus: NO-P3

Other protection measures:

Body protection: Chemical resistant safety shoes, acid-resistant Chemical protection clothing; General information: When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

8.2.3. Environmental exposure controls

No data available

8.3. Additional information

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: colourless

Odour: stinging

Safety relevant basis data

parameter		at °C	Method	Remark
pH	2 – 3	20 °C		
Melting point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	100 – 110 °C			pressure: 1013 mbar
Decomposition temperature (°C):	*not determined*			
Flash point	*not determined*			
Evaporation rate	*not determined*			
Ignition temperature in °C	*not determined*			
Upper/lower flammability or explosive limits	*not determined*			
Vapour pressure	*not determined*			
Vapour density	*not determined*			
Relative density	1.6 – 1.8 g/cm³	20 °C		
Bulk density	*not determined*			
Water solubility (g/L)	*not determined*			
Partition coefficient: n-octanol/ water	*not determined*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	*not determined*	40 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Materials to avoid: Heavy metals, Alkali (lye)

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

Exothermal decomposition with formation of: Oxygen, Danger of bursting container.

10.4. Conditions to avoid

Danger of decomposition under influence of heat.

10.5. Incompatible materials

Heavy metals, Alkali (lye)

10.6. Hazardous decomposition products

Heating causes rise in pressure with risk of bursting.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

CAS No.	Substance name	Toxicological information
7722-84-1	hydrogen peroxide	**LD_{50} oral:** 376 mg/kg (Ratte) **LD_{50} dermal:** 3,000 mg/kg (Ratte) **LC_{50} inhalative:** 2 mg/l 4 h (Ratte)

Acute oral toxicity:
Harmful if swallowed.

Acute dermal toxicity:
The classification criteria for this hazard class are not met by definition.

ALBILEX-3000-A

Acute inhalation toxicity:
The classification criteria for this hazard class are not met by definition.

Skin corrosion/irritation:
Causes severe skin burns and eye damage.

Serious eye damage/irritation:
Causes serious eye damage.

Respiratory or skin sensitisation:
Guinea pig not sensitising.

Germ cell mutagenicity:
The classification criteria for this hazard class are not met by definition.

Carcinogenicity:
Does not mutagenic in animals

Reproductive toxicity:
The classification criteria for this hazard class are not met by definition.

STOT-single exposure:
May cause respiratory irritation.

STOT-repeated exposure:
The classification criteria for this hazard class are not met by definition.

Aspiration hazard:
The classification criteria for this hazard class are not met by definition.

Additional information:
White spots on skin vanish within a few hours.

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
7722-84-1	hydrogen peroxide	**LC_{50}:** 22 mg/l 4 d **EC_{50}:** 2.3 mg/l 2 d **EC_{50}:** 0.71 mg/l 3 d **EC_{50}:** 5.38 mg/l 4 d

Aquatic toxicity:
Very toxic to aquatic life with long lasting effects.
LC50 Fisch (96 Stunden)
Minimalwert: 22 mg/l
Maximalwert: 26,7 mg/l
Medianwert: 24,4 mg/l
Studienanzahl: 2

EC50 Krustentiere (48 Stunden)
Minimalwert: 2,32 mg/l
Maximalwert: 24 mg/l
Medianwert: 13,2 mg/l
Studienanzahl: 2

EC50 Algen (72 Stunden)
Minimalwert: 0,71 mg/l
Maximalwert: 5,81 mg/l
Medianwert: 3,36 mg/l
Studienanzahl: 6

EC50 Algen (96 Stunden)
Minimalwert: 5,38 mg/l
Maximalwert: 6,49 mg/l
Medianwert: 5,74 mg/l
Studienanzahl: 3

Effects in sewage plants:
After neutralization and dilution 1:100 with water small amounts can be given to the sewage system.

Additional ecotoxicological information:
Referenzen:
Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.
Watanabe, H., E. Takahashi, Y. Nakamura, S. Oda, N. Tatarazako, and T. Iguchi 2007. Development of a Daphnia magna DNA Microarray for Evaluating the Toxicity of Environmental Chemicals. Environ.Toxicol.Chem. 26(4):669-676; Office of Pesticide Programs 2000. Pesticide Ecotoxicity Database (Formerly: Environmental Effects Database (EEDB)). Environmental Fate and Effects Division, U.S.EPA, Washington, D.C.
Smit, M.G.D., E. Ebbens, R.G. Jak, and M.A.J. Huijbregts 2008. Time and Concentration Dependency in the Potentially Affected Fraction of Species: The Case of Hydrogen Peroxide Treatment of Ballast Water. Environ.Toxicol.Chem. 27(3):746-753; Drabkova, M., B. Marsalek, and W. Admiraal 2007. Photodynamic Therapy Against Cyanobacteria. Environ.Toxicol. 22(1):112-115
Gregor, J., D. Jancula, and B. Marsalek 2008. Growth Assays with Mixed Cultures of Cyanobacteria and Algae Assessed by In Vivo Fluorescence: One Step Closer to Real Ecosystems?. Chemosphere 70(10):1873-1878

12.2. Persistence and degradability

Additional information:
In soil and waters rapid decomposition to water and oxygen occurs.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

In soil and waters rapid decomposition to water and oxygen occurs.

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
7722-84-1	hydrogen peroxide	—

12.6. Other adverse effects

Chemical oyxgen demand (COD): 13 mg/g Dilution 1 : 1000

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not dispose of as domestic waste. Small amounts (several grams) can be given to the sewage system after dilution 1:100 with water. Bigger amounts must be treated as special waste.

Waste treatment options

Appropriate disposal / Product:
Consult the appropriate local waste disposal expert about waste disposal. Wash with water und give to plastic recycling.

13.2. Additional information

No data available

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN-No.			
UN 2984	UN 2984	UN 2984	UN 2984
14.2. UN proper shipping name			
Hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution	Hydrogen peroxide, aqueous solution

ALBILEX-3000-A

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.3. Transport hazard class(es)			
 5.1	 5.1	 5.1	 5.1
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
No data available			
14.6. Special precautions for user			
Special provisions: **Limited quantity (LQ):** **Hazard identification number (Kemler No.):** 50 **Classification code:** O1 **tunnel restriction code:** (E) **Remark:**	**Special provisions:** **Limited quantity (LQ):** **Classification code:** O1 **Remark:**	**Special provisions:** **Limited quantity (LQ):** **EmS-No.:** F-H; S-Q **Remark:**	**Special provisions:** **Limited quantity (LQ):** **Remark:**

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

Additional information:

Keep away from food, drink and animal feedingstuffs.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

No data available

15.1.2. National regulations

[DE] National regulations

Water hazard class (WGK)

WGK:

1 - schwach wassergefährdend

15.2. Chemical Safety Assessment

No data available

15.3. Additional information

No data available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Acute toxicity (oral) *(Acute Tox. 4)*	H302: Harmful if swallowed.	
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	
Serious eye damage/eye irritation *(Eye Dam. 1)*	H318: Causes serious eye damage.	
STOT-single exposure *(STOT SE 3)*	H335: May cause respiratory irritation.	
Hazardous to the aquatic environment *(Aquatic Chronic 1)*	H410: Very toxic to aquatic life with long lasting effects.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

16.6. Training advice

No data available

16.7. Additional information

The data presented here correspond to the present state of our knowledge and experience and are intended to describe our product with respect to possible safety demands. We imply with this however no guarantee of properties or description of qualities.