Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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

1.1. Product identifier

Trade name/designation:

ALBILEX-AKTIV-des

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

Notfallauskunft: The Emergency telephone is available during Europaen time zone office time between 8 am and 5 pm on working days., +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.	Calculation method.
Acute toxicity (dermal) *(Acute Tox. 4)*	H312: Harmful in contact with skin.	Calculation method.
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	Calculation method.
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 1)*	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

2.2. Label elements

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

Hazard pictograms:

GHS05
Corrosion

GHS09
Environment

Signal word: Danger

hazard statements for health hazards	
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.

hazard statements for environmental hazards	
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements Prevention	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280.4	Wear protective gloves/protective clothing and eye/face protection.

Precautionary statements Response	
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302 + P350	IF ON SKIN: Gently wash with plenty of soap and water.
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.
P312	Call a POISON CENTER/doctor/.../ if you feel unwell.

2.3. Other hazards

Adverse human health effects and symptoms:

Harmful if swallowed. Irritating to respiratory system and skin. Risk of serious damage to eyes.

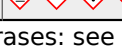
SECTION 3: Composition / information on ingredients

3.2. Mixtures

Description:

Aqueous solution of Hydrogen peroxide, stabilized

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, Ox. Liq. 1, Acute Tox. 4  **Danger** H271-H302-H314-H332	35 – 50 %
CAS No.: 79-21-0 **EC No.:** 201-186-8 **REACH No.:** 01-2119531330-56-XXXX	**peracetic acid** Skin Corr. 1A, Flam. Liq. 3, Org. Perox. CD, Acute Tox. 4, Aquatic Acute 1  **Danger** H226-H242-H302-H312-H314-H332-H400	0 – 5 %

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

Move victim out of danger zone.

Following inhalation:

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

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
IF ON CLOTHING: Immediately remove any contaminated clothing, shoes or stockings.

After eye contact:

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.Consult an ophthalmologist.

After ingestion:

Let water be drunken in little sips (dilution effect). Do NOT induce vomiting. Call a physician immediately.

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

White spots on skin vanish within a few hours.

4.3. Indication of any immediate medical attention and special treatment needed
Gas embolie possible after drinking

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media:
Water spray
Unsuitable extinguishing media:
Extinguishing powder Carbon dioxide.

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

5.3. Advice for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information
No data available

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. Wear personal protection equipment.

6.1.2. For emergency responders
No data available

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 cleaning up:
Pump away bigger amounts. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Wash with plenty of water. Spilled product must never be returned to the original container for recycling.

6.4. Reference to other sections
No data available

6.5. Additional information
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:
Put lids on containers immediately after use.
Fire prevent measures:
Heating causes rise in pressure with risk of bursting. Do not keep the container sealed.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels:
Do not keep the container sealed. Suitable material for Container: Polyethylene Polypropylen
Hints on storage assembly:
Do not store together with: Material, combustible.
Further information on storage conditions:
Protect against: Light Keep in a cool, well-ventilated place.

7.3. Specific end use(s)
Recommendation:
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

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Tightly sealed safety glasses. oder Face protection shield

Skin protection:

Suitable material: Latex, NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber)
Thickness of the glove material: 0,65 mm; 0,4 mm; 0,7 mm
Breakthrough time (maximum wearing time): > 8h

Respiratory protection:

Suitable respiratory protection apparatus: NO-P3

Other protection measures:

Protective clothing: Chemical resistant safety shoes Chemical protection clothing acid-resistant
General health and safety measures: 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: characteristic

Safety relevant basis data

parameter		at °C	method	Remark
pH	2 – 4	20 °C		
Melting point/freezing point	-33 °C			
Freezing point	*not determined*			
Initial boiling point and boiling range	108 °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	48 Pa	30 °C		

parameter		at °C	method	Remark
Vapour density	*not determined*			
Density	1.1 – 1.15 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*			

9.2. Other information
No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
Materials to avoid Heavy metals Alkali (lye) material, combustible.

10.2. Chemical stability
No data available

10.3. Possibility of hazardous reactions
Due to gaseous decomposition products, overpressure can occur in tightly sealed containers. Oxidising properties: Oxygen

10.4. Conditions to avoid
In case of warming: Decomposition under formation of: Oxygen

10.5. Incompatible materials
Heavy metals Alkali (lye) material, combustible.

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)
79-21-0	peracetic acid	**LD_{50} oral:** 1,740 mg/kg (Ratte) **LD_{50} dermal:** 1,590 mg/kg (Kaninchen)

Skin corrosion/irritation:
Risk of serious damage to eyes. Causes serious eye irritation. Causes skin irritation.

Respiratory or skin sensitisation:
Guinea pig not sensitising.

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

12.3. Bioaccumulative potential

Accumulation / Evaluation:
Additional information: No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

CAS No.	Substance name	Results of PBT and vPvB assessment
7722-84-1	hydrogen peroxide	—
79-21-0	peracetic acid	—

No data available

12.6. Other adverse effects

Chemical oyxgen demand (COD): 13 mg/g Verdünnung 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 / Package:

Wash with water and give to pastic 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.			
2014	2014	2014	2014
14.2. UN proper shipping name			
Wasserstoffperoxid, wässrige Lösung	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 20 % but not more than 60 % hydrogen peroxide (stabilized as necessary)	Hydrogen peroxide aqueous solution	Hydrogen peroxide aqueous solution
14.3. Transport hazard class(es)			
 5.1	 5.1	 5.1	 5.1
14.4. Packing group			
II		II	II
14.5. Environmental hazards			
-	-	No	-
14.6. Special precautions for user			
Hazard identification number (Kemler No.): 58 **Classification code:** - **Remark:** Classification code: OC1	**Classification code:** -	**Remark:** EmS-No.: F-H, S-Q	**Remark:** Remark: Transport prohibited.

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

Other regulations, restrictions and prohibition regulations

Merkblatt BG-Chemie 004, "Reizende-Ätzende Stoffe" beachten

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.	Calculation method.
Acute toxicity (dermal) *(Acute Tox. 4)*	H312: Harmful in contact with skin.	Calculation method.
Skin corrosion/irritation *(Skin Corr. 1A)*	H314: Causes severe skin burns and eye damage.	Calculation method.
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Acute 1)*	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 1)*	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

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

Hazard statements	
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H271	May cause fire or explosion; strong oxidiser.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.

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.