

SAFETY DATA SHEET

according to REACH Regulation UK SI 2019/758, as amended, and UK SI 2020/1577

Revision date: 29 Mar 2021

Print date: 3 Sep 2021

Version: 1



TYROLIT Densifier 3

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

1.1. Product identifier

Trade name/designation:

TYROLIT Densifier 3

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

Use of the substance/mixture:

Impregnation agent

1.3. Details of the supplier of the safety data sheet

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

Tyrolit Construction Products GmbH

Swarovskistrasse 33

6130 Schwaz

Austria

Telephone: +43 5242 6060

E-mail: construction@tyrolit.com

Website: www.tyrolit.com

E-mail (competent person): construction@tyrolit.com

In case of problematic exposure the enquirer should call NHS 111 or a doctor

1.4. Emergency telephone number

Environmental Department (available from 9 a.m. – 5 p.m.), +43 664 8292 740 (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567:

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

2.2. Label elements

Labelling according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Hazard statements: -

Supplemental hazard information: -

Precautionary statements Prevention

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

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

No data available

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SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567	Concentration
CAS No.: 1310-65-2 EC No.: 215-183-4 REACH No.: 01-2119560576-31-XXXX	lithium hydroxide Acute Tox. 4 (H302), Skin Corr. 1B (H314) Danger	0 - < 3 weight-%

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

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 but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

Following inhalation:

Provide fresh air.

After eye contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

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

No known symptoms to date.

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:

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media:

Full water jet

5.2. Special hazards arising from the substance or mixture

Pyrolysis products, toxic. The product itself does not burn.

Hazardous combustion products:

Nitrogen oxides (NOx), Carbon dioxide (CO₂), Carbon monoxide, 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. Dispose of waste according to applicable legislation.

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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. Special danger of slipping by leaking/spilling product. Provide adequate ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray.

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:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Wipe up with absorbent material (eg. cloth, fleece). Water (with cleaning agent)

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.

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).

Fire prevent measures:

Usual measures for fire prevention. No special measures are necessary.

Measures to prevent aerosol and dust generation:

Use only outdoors or in a well-ventilated area.

Environmental precautions:

Do not allow to enter into surface water or drains.

Advices on general occupational hygiene

Wash hands before breaks and after work. Use protective skin cream before handling the product. 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:

Keep container tightly closed in a cool, well-ventilated place.

Packaging materials:

Keep/Store only in original container.

Requirements for storage rooms and vessels:

The floor should be leak tight, jointless and not absorbent.

Hints on storage assembly:

Do not store together with: Food and feedingstuffs

Storage class (TRGS 510, Germany): 12 - non-combustible liquids that cannot be assigned to any of the above storage classes

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Further information on storage conditions:

Protect containers against damage.

7.3. Specific end use(s)

Recommendation:

Observe technical data sheet.

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
WEL (GB)	lithium hydroxide CAS No.: 1310-65-2 EC No.: 215-183-4	② 1 mg/m ³

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
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	1.38 mg/m ³	① DNEL Consumer ② Long-term - inhalation, systemic effects
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	5.61 mg/kg bw/day	① DNEL worker ② Long-term - inhalation, local effects
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	0.74 mg/m ³	① DNEL Consumer ② Long-term - dermal, systemic effects
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	1.49 mg/kg bw/day	① DNEL worker ② Long-term - dermal, local effects
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	0.74 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects

Substance name	PNEC Value	① PNEC type
Silicic acid, potassium salt CAS No.: 1312-76-1 EC No.: 215-199-1	7.5 mg/l	① PNEC aquatic, freshwater

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 EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: Butyl caoutchouc (butyl rubber)
Breakthrough time: 120 min. In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

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Respiratory protection:

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Respiratory protection necessary at: aerosol or mist formation. Filtering device (full mask or mouthpiece) with filter: P-2

Other protection measures:

Do not breathe vapour/aerosol. Avoid contact with eyes. Wear suitable protective clothing and gloves.

8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

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: not determined

Safety relevant basis data

parameter		at °C	Method	Remark
pH	11	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	> 100 °C			
Decomposition temperature	<i>not determined</i>			
Flash point	<i>not determined</i>			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	≈ 1.11 g/cm ³	20 °C	ISO 2811, part 2	
Relative density	<i>not determined</i>			
Bulk density	<i>not determined</i>			
Water solubility	completely miscible	20 °C		
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>			

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions. The product itself does not burn.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid

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10.4. Conditions to avoid

See section 7. No additional measures necessary.

10.5. Incompatible materials

Materials to avoid: Acid, Light metal

10.6. Hazardous decomposition products

In case of fire: Gases/vapours, toxic

Further information

No known hazardous decomposition products.

SECTION 11: Toxicological information

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

Substance name	Toxicological information
lithium hydroxide CAS No.: 1310-65-2 EC No.: 215-183-4	LD₅₀ oral: 210 mg/kg (Rat) LD₅₀ dermal: >2,000 mg/kg (rat) LC₅₀ Acute inhalation toxicity (dust/mist): >3.4 mg/l 4 h (rat)

Acute oral toxicity:

not determined

Acute dermal toxicity:

not determined

Acute inhalation toxicity:

not determined

Skin corrosion/irritation:

not determined

Serious eye damage/irritation:

not determined

Respiratory or skin sensitisation:

not determined

Germ cell mutagenicity:

not determined

Carcinogenicity:

not determined

Reproductive toxicity:

not determined

STOT-single exposure:

not determined

STOT-repeated exposure:

not determined

Aspiration hazard:

not determined

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

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12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

The evaluation was carried out according to the calculation method.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product:

06 02 99	Wastes not otherwise specified
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Waste code packaging:

15 01 02	Plastic packaging
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Waste treatment options

Appropriate disposal / Product:

Dispose of waste according to applicable legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package:

Completely emptied packages can be recycled.

SECTION 14: Transport information

No dangerous good in sense of these transport regulations.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.2. UN proper shipping name			
No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.	No dangerous good in sense of these transport regulations.
14.3. Transport hazard class(es)			
not relevant			
14.4. Packing group			
not relevant			
14.5. Environmental hazards			
not relevant			
14.6. Special precautions for user			
not relevant			

14.7. Maritime transport in bulk according to IMO instruments

not relevant

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SECTION 15: Regulatory information

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

15.1.1. EU legislation

Other regulations (EU):

2008/98/EC, 2001/118/EC, 1999/13/EC, 2004/42/EC, (EC) No. 1907/2006, (EU) 2015/830, 75/324/EEC, 2008/47/EC, (EC) No. 1272/2008, 2008/68/EC, (EC) No. 648/2004

Information on Directive 1999/13 / EC on the limitation of emissions of volatile organic compounds (VOC-RL): VOC (in g / L): 0

VOC EU Limit (2004/42/EG) (cat. IIA/h): 30 g/L, VOC-value 0 g/L

This product meets the requirements of Regulation (EC) No. 1935/2004 on the limitation of VOC content.

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

See overview table at www.euphrac.eu

16.3. Key literature references and sources for data

No data available

Substance name	Type	source of supply
lithium hydroxide CAS No.: 1310-65-2 EC No.: 215-183-4	LD ₅₀ dermal; LC ₅₀ Acute inhalation toxicity (dust/mist)	Source: European Chemicals Agency, http://echa.europa.eu/

16.4. Classification for mixtures and used evaluation method according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

Classification according to GB-CLP Regulation, UK SI 2019/720 and UK SI 2020/1567:

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

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

Hazard statements	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.

16.6. Training advice

No data available

16.7. Additional information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.