

Trade name: Kalii hydroxidum in Schuppen

Substance number: 064728 Date revised: 12.04.2019 Version: 3 / CH

> Replaces Version: 2/CH Print date: 01.10.19

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

## 1.1. Product identifier

Kalii hydroxidum in Schuppen

Item No. 06472800

Registration no.

EC No.: 215-181-3 CAS No. 1310-58-3

#### 1.3. Details of the supplier of the safety data sheet

#### Address/Manufacturer

Hänseler AG Industriestrasse 35 9100 Herisau

Telephone no. 0041 (0)71 353 58 58 E-mail address of sdb@haenseler.ch

person responsible

for this SDS

#### 1.4. Emergency telephone number

Switzerland: 145 / Abroad +41 (0)44 251 51 51

## **SECTION 2: Hazards identification \*\*\***

#### 2.1. Classification of the substance or mixture

#### Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Met. Corr. 1 H290 Acute Tox. 4 H302 Skin Corr. 1A H314 Eye Dam. 1 H318

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008 For explanation of abbreviations see section 16.

#### 2.2. Label elements

## Labelling according to regulation (EC) No 1272/2008

#### Hazard pictograms



#### Signal word

Danger

#### Hazard statements \*\*\*

H290 May be corrosive to metals. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

## Precautionary statements \*\*\*

P234 Keep only in original packaging.



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

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin

with water [or shower].

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 or doctor.

P501.3 Disposal in compliance with local and national regulations.

#### Hazardous component(s) to be indicated on label (Regulation (EC) No. 1272/2008)

contains \*\*\* Potassium hydroxide; Sodium hydroxide

# **SECTION 3: Composition/information on ingredients** \*\*\*

#### Chemical characterization

Kalii hydroxidum in Schuppen

#### Hazardous ingredients \*\*\*

#### Potassium hydroxide

CAS No. 1310-58-3 EINECS no. 215-181-3

Registration no. 01-2119487136-33-XXXX

Concentration >= 91 %

Classification (Regulation (EC) No. 1272/2008)

Acute Tox. 4 H302 Skin Corr. 1A H314 Met. Corr. 1 H290

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319 >= 0.5 < 2 Skin Corr. 1A H314 >= 5 Skin Corr. 1B H314 >= 2 < 5 Skin Irrit. 2 H315 >= 0.5 < 2

Sodium hydroxide

CAS No. 1310-73-2 EINECS no. 215-185-5

Registration no. 01-2119457892-27-XXXX

Concentration >= 1 < 2 %

Classification (Regulation (EC) No. 1272/2008)

Skin Corr. 1A H314

Concentration limits (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319 >= 0.5 < 2Skin Corr. 1A H314 >= 5Skin Corr. 1B H314 >= 2 < 5Skin Irrit. 2 H315 >= 0.5 < 2

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

## **General information**

Remove contaminated clothing immediately and dispose of safely.

#### After inhalation

Ensure supply of fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice.

#### After skin contact



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After contact with skin, wash immediately with plenty of water. After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take medical treatment.

#### After eye contact

Shield unaffected eye. In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

## After ingestion

Ensure supply of fresh air. Rinse out mouth and give plenty of water to drink. Call in a physician immediately and show him the Safety Data Sheet. Do not induce vomiting. No trials on neutralisation.

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

Chemical burn, Muscle cramps or pains, bleeding vomiting

# 4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / hazards

Risk of stomach perforation

## **SECTION 5: Firefighting measures**

# 5.1. Extinguishing media

### Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

## 5.2. Special hazards arising from the substance or mixture

If a fire breaks out nearby evolution of dangerous gases possible.

## 5.3. Advice for firefighters

## Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Wear full protective suit.

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Keep away unprotected persons. Wear protective equipment. Forms slippery surfaces with water.

## 6.2. Environmental precautions

Do not allow to enter drains or waterways.

#### 6.3. Methods and material for containment and cleaning up

For tall amounts: Take up mechanically and collect in suitable container for disposal. Clean contaminated surfaces, appropriate is: Slightly acid solution. Rinse away rest with plenty of water.

# **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

#### Advice on safe handling

Keep container tightly closed. Provide suitable exhaust ventilation at processing machines. Avoid dust formation.

#### Advice on protection against fire and explosion

The product is not combustible.

## 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Do not use light metal drums. Provide alkali-resistant floor.



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#### Hints on storage assembly

Do not store with acids.

#### Storage classes

Storage class according to TRGS 510 8B Non-combustible corrosive hazardous

substances

Storage category (Switzerland) 8 Caustic and corrosive substances

## Further information on storage conditions

Keep container tightly closed. Protect from atmospheric moisture and water. Product is hygroscopic.

## **SECTION 8: Exposure controls/personal protection \*\*\***

## 8.1. Control parameters

## **Exposure limit values \*\*\***

#### Potassium hydroxide

List SUVA Type MAK

Value 2 mg/m³

Status: 2017; Remarks: Haut, OAWKT & AugeKT; NIOSH

Sodium hydroxide

List SUVA Type MAK

Value 2 mg/m³
Short term exposure limit 2 mg/m³

Pregnancy group: S; Status: 2017; Remarks: SSc; Haut, OAWKT & AugeKT; NIOSH, OSHA

#### 8.2. Exposure controls

#### **Exposure controls**

See Section 7. No measures exeeding the ones mentioned necessary.

#### General protective and hygiene measures

Keep away from food-stuffs, beverages and feed-stocks. Wash hands and face before breaks and after work. Avoid contact with skin and eyes. Wash hands and face after work. Do not inhale dust/fumes/mist. Hold eye wash fountain available.

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#### Respiratory protection

Breathing apparatus in the event of aerosol, mist or fume formation. Particle filter P2

#### Hand protection

Gloves (alkali-resistant)

Appropriate Material Natural Latex Material thickness 0.5

Breakthrough time >= 8 h
Appropriate Material Polychloroprene

Material thickness = 0.5 mm
Appropriate Material nitrile rubber - NBR

Material thickness 0.35 mm
Appropriate Material Butyl rubber - Butyl

Material thickness 0.5 mm
Appropriate Material Fluoro carbon rubber - FKM

Material thickness 0.4 mm
Reference substance Polyvinyl chloride
Material thickness 0.5 mm

#### Eye protection

Tightly fitting safety glasses



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#### **Body protection**

Alkali-resistant protective clothing

# SECTION 9: Physical and chemical properties \*\*\*

## 9.1. Information on basic physical and chemical properties

**Form** Flakes Colour white odourless Odour

pH value

Value 14 Concentration/H2O 100 **Temperature** 20

**Melting point** 

°C Value 406

Initial boiling point and boiling range

°C Value 1327

Flash point

Value °C Remarks Not applicable

Flammability (solid, gas)

Not ignitable

Vapour pressure \*\*\*

Value 1.3 hPa Temperature 719 °C

**Density** 

8.0 Value g/cm3

Solubility in water

Value 1200 q/l °C 25

Temperature

**Decomposition temperature** 

Remarks No decomposition if used as prescribed.

**Oxidising properties** 

evaluation None known

#### 9.2. Other information

#### Other information

The product is not dangerous for explosions. Product is hygroscopic.

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Corrosive to metals.

#### 10.2. Chemical stability

No decomposition if stored and applied as directed.

#### 10.3. Possibility of hazardous reactions

Possible incompatibility with materials lister under section 10.5.

#### 10.4. Conditions to avoid



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Protect from atmospheric moisture and water.

#### 10.5. Incompatible materials

Water, amines, Ammonia, Reactions with light metals, with evolution of hydrogen. strong acids, ammonium salts, halocarbons, Organic materials

#### 10.6. Hazardous decomposition products

No hazardous decomposition products known.

# SECTION 11: Toxicological information \*\*\*

## 11.1. Information on toxicological effects

## **Acute oral toxicity**

Kalii hydroxidum in Schuppen

ATE 272.627 mg/kg

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Method calculated value (Regulation (EC) No. 1272/2008)

**Acute oral toxicity (Components)** 

Potassium hydroxide

Species rat

LD50 273 mg/kg

Potassium hydroxide

Species rat

LD50 333 mg/kg

Method OECD 425

Sodium hydroxide

Species rat

LD50 2000 mg/kg

Skin corrosion/irritation (Components)

Potassium hydroxide

Species rabbit

Duration of exposure 24 h

evaluation corrosive
Method OECD 405

Serious eye damage/irritation (Components) \*\*\*

Potassium hydroxide

Species rabbit

evaluation strongly corrosive

Method OECD 405

Remarks Influence of the product with the eyes can lead to blindness.

Sensitization (Components)

Potassium hydroxide

Species guinea pig evaluation non-sensitizing Source Literature value

Specific Target Organ Toxicity (STOT) (Components)

Potassium hydroxide

Remarks Not applicable

**Experience in practice** 

After Swallowing: burns in mouth, throat, oesophagus and gastrointetinal tract. Risk of perforation in the oesophagus and stomach.



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# **SECTION 12: Ecological information \*\*\***

## 12.1. Toxicity

## Fish toxicity (Components)

Potassium hydroxide

Species Gambusia affinis

LC50 80 mg/l

Duration of exposure 96 h

Sodium hydroxide

Species Gambusia affinis

LC50 125 mg/l

Duration of exposure 96 h

Sodium hydroxide

Species rainbow trout (Oncorhynchus mykiss)

LC50 45.4 mg/l

Duration of exposure 96 h

## **Daphnia toxicity (Components)**

Sodium hydroxide

Species Daphnia

EC50 40.38 mg/l

Duration of exposure 48 h

Remarks Immobilization

Sodium hydroxide

Species Daphnia magna

EC50 76 mg/l

Duration of exposure 24 h

## **Bacteria toxicity (Components)**

Sodium hydroxide

Species Photobacterium phosphoreum

EC50 22 mg/l

Duration of exposure 15 min

#### 12.2. Persistence and degradability

#### **Biodegradability (Components)**

Potassium hydroxide

Remarks Inorganic product, cannot be eliminated from the water by biological

purification processes.

#### 12.3. Bioaccumulative potential

#### **General information**

Not applicable

## 12.4. Mobility in soil

#### Mobility in soil (Components)

#### Potassium hydroxide

Will not adsorb on soil.

## 12.5. Results of PBT and vPvB assessment

## **Evaluation of persistance and bioaccumulation potential (Components)**

## Potassium hydroxide

The Substance doesn't meets PBT/vPvB-criterions



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#### 12.6. Other adverse effects

## General information / ecology

Neutralization is normally necessary before waste water is discharged into water treatment plants. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

## Disposal recommendations for the product

EWC waste code No not dispose with rubbish.

EWC waste code Should not be released into the sanitary sewer system.

In accordance with regulations for special waste, must be taken to an authorised special waste disposal site or incineration plant.

#### Disposal recommendations for packaging

Uncontaminated packaging may be taken for recycling.

# **SECTION 14: Transport information**

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	E		
14.1. UN number	1813	1813	1813
14.2. UN proper shipping name	POTASSIUM HYDROXIDE, SOLID	POTASSIUM HYDROXIDE, SOLID	POTASSIUM HYDROXIDE, SOLID
14.3. Transport hazard class(es)	8	8	8
Label	· · · · · · · · · · · · · · · · · · ·		\$ 5 m
14.4. Packing group	II	II	II
Limited Quantity	1 kg		
Transport category	2		

# SECTION 15: Regulatory information \*\*\*

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

#### Water Hazard Class (Germany) \*\*\*

Water Hazard Class WGK 1

(Germany)

Remarks Derivation of WGK according to Annex 1 No. 5.2 AwSV

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# **SECTION 16: Other information**

## Hazard statements listed in Chapter 3

H290 May be corrosive to metals. H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

#### **CLP categories listed in Chapter 3**

Acute Tox. 4 Acute toxicity, Category 4

Met. Corr. 1 Substance or mixture corrosive to metals, Category 1

Skin Corr. 1A Skin corrosion, Category 1A

#### **Supplemental information**

Relevant changes compared with the previous version of the safety data sheet are marked with: \*\*\* This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.