

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version no. : 2.1
Prepared on : 11.02.2026
Revised on : -

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

1.1 Product identifiers

Product name Potassium hydroxide
Product Number PSR23765 / PSR9997 / PSR40433
Brand PureSynth research chemicals
CAS No. 1310-58-3

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

Identified uses : Laboratory chemicals

1.3 Details of the supplier of the safety data sheet

Company PureSynth Research Chemicals GmbH.
64683 Einhausen Marie-Curie-Straße. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290 Acute toxicity, Oral (Category 4), H302 Skin corrosion (Sub-category 1A), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P234 Keep only in original packaging.

P260	Do not breathe dusts or mists.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Caustic potash	HKO	1310-58-3
Component	Classification	Concentration
Potassium hydroxide	Met. Corr. 1; Acute Tox. 4; Skin Corr. 1A; Eye Dam.1; H290, H302, H314, H318	<= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact	Rinse thoroughly with plenty of water as precaution.
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Firefighting measures

Extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Suitable extinguishing media	
Special hazards arising from the substance or mixture	Potassium oxides Not combustible. Ambient fire may liberate

hazardous vapours.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

Further information

No data available

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

No metal containers. Tightly closed. Dry. Absorbs carbon dioxide (CO₂) from air. Air sensitive. strongly hygroscopic

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters

Components with workplace control parameters

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment:

Eye / face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Skin protection

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full- face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance	Form: pellets Colour: colorless
Odour	odorless
pH - Value	ca.13,5 at 5,6 g/l at 25 °C
Density	2,04 g/cm ³ at 20 °C
Boiling Point	1.327 °C at 1.013 hPa
Melting Point	361 °C - lit.
Solubility in water	No data available
Flash point	No data available
Vapour pressure	1 hPa at 719 °C
Auto -ignition temperature	No data available
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	No data available
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	No data available

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	No data available
Chemical stability	The product is chemically stable under standard ambient conditions (room temperature) .Heat of solution is very high, and with limited amounts of water, violent boiling may occur.
Possibility of hazardous reactions	No data available
Condition to avoid	Do not heat above melting point. no information available
Incompatible materials	animal/vegetable tissues, glass, various plastics, Metals
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

	LD50 Oral - Rat - male - 333 mg/kg (OECD Test Guideline 425)
Acute toxicity	Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach. Symptoms: burns of mucous membranes, Cough, Shortness of breath, Possible damages:, damage of respiratory tract Dermal: No data available Skin - Rabbit
Skin corrosion/irritation	Result: Causes burns. Remarks: (IUCLID)
Serious eye damage/eye irritation	Eyes - Rabbit Result: Causes serious eye damage. (OECD Test Guideline 405) Causes serious eye damage.
Respiratory or skin sensitization	Sensitisation test: - Guinea pig Result: negative Remarks: (IUCLID) Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Result: negative
Germ cell mutagenicity	Remarks: (ECHA) Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative
Carcinogenicity	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure Aspiration hazard	No data available
Additional Information	RTECS: TT2100000 To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. After uptake: Vomiting shock Other dangerous properties cannot be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

Toxicity	
Toxicity to fish	LC50 - Gambusia affinis (Mosquito fish) - 80 mg/l - 96 hRemarks: (IUCLID)
Toxicity to daphnia and other aquatic invertebrates	No data available
Toxicity to algae	No data available
Toxicity to bacteria	No data available
Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganicsubstances.
Bioaccumulative potential	No data available
Mobility in soil	No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects

No data available

SECTION 13: Disposal considerations

**Waste treatment methods
Products**

Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	1813	Potassium hydroxide, solid	8	II	No
IMDG	1813	Potassium hydroxide, solid	8	II	No
IATA	1813	Potassium hydroxide, solid	8	II	No

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.