

SAFETY DATA SHEET**Potassium hydroxide**

Inner Mongolia Ruida Taifeng Chemical Co., Ltd.

SDS

- According to GHS (Eighth Revised Edition)

Section 1 Product and Company Identification**> Product Identifier**

Product Name	Potassium hydroxide
Synonyms	-
CAS No.	Not applicable
EC No.	Not applicable
Molecular Formula	Not applicable

> Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Relevant Identified Uses	Please consult manufacturer.
Uses Advised Against	Please consult manufacturer.

> Details of the Supplier of the Safety Data Sheet

Applicant Name	Inner Mongolia Ruida Taifeng Chemical Co., Ltd.
Application Address	Ruilian Avenue, Alashan Economic Development Zone (Wusitai Town), Alxa League, Inner Mongolia Autonomous Region.
Applicant Post Code	750336

Supplier Name	Inner Mongolia Ruida Taifeng Chemical Co., Ltd.
Supplier Address	Ruilian Avenue, Alashan Economic Development Zone (Wusitai Town), Alxa League, Inner Mongolia Autonomous Region.
Supplier Post Code	750336

> Emergency Phone Number

Emergency Phone Number	+86-483-8185831
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Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the eighth revised edition):

> GHS Hazard Class

Acute Toxicity – Oral Category 4

Skin Corrosion/Irritation	Category 1
Eye Damage/Irritation	Category 1

> GHS Label Elements

Pictogram



Signal Word

Danger

> Hazard Statements

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage

> Precautionary Statements

Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash contact area thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

Response

P316	Get emergency medical help immediately.
P317	Get medical help.
P321	Specific treatment (see measures on this label).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P301+P317	IF SWALLOWED: Get medical help.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P361+P354	IF ON SKIN: Take off immediately all contaminated clothing. Immediately rinse with water for several minutes.
P305+P354+P338	IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 Composition/Information on Ingredients

Component	Concentration (weight percent, %)	CAS No.	EC No.
Potassium hydroxide	≥ 90	1310-58-3	215-181-3
Potassium carbonate	≤ 0.5	584-08-7	209-529-3
Chloride	≤ 0.005	28724-32-5	643-058-8
Sulfate	≤ 0.002	14808-79-8	231-594-1

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of First-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

- 1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

> Indication of Any Immediate Medical Attention and Special Treatment Needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing Media	Dry chemical, carbon dioxide or alcohol-resistant foam.
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter or spread fire.

> Specific Hazards Arising from the Substance or Mixture

- 1 Fire may produce irritating, poisonous or corrosive gases.
- 2 Containers may explode when heated.
- 3 Fire exposed containers may vent contents through pressure relief valves.
- 4 May expansion or decompose explosively when heated or involved in fire.

> Advice for Firefighters

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

> Environmental Precautions

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

> Methods and Materials for Containment and Cleaning Up

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Section 7 Handling and Storage

> Precautions for Handling

- 1 Handling is performed in a well ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

> Precautions for Storage

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/ hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

Component	Country/Region	Limit Value - Eight Hours		Limit Value - Short Term	
		ppm	mg/m ³	ppm	mg/m ³
Potassium hydroxide 1310-58-3	USA - NIOSH	-	-	-	2
	South Korea	-	-	-	2
	Poland	-	0.5	-	1
	Ireland	-	-	-	2
	Denmark	-	2	-	2
	Australia	-	-	-	2
Potassium carbonate 584-08-7	Latvia	2	0.5	-	-

Biological Limit Values

No information available

Monitoring Methods

- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment

of exposure to chemical and biological agents.

- 2 GBZ/T 160 Determination of toxic substances in workplace air(Series effective standard)and GBZ/T 300 Determination of toxic substances in workplace air(Series standard).

> Engineering Controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

> Personal Protection Equipment

Eye Protection	Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).
Hand Protection	Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.
Respiratory protection	If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.
Skin and Body Protection	Wear fire/flame resistant/retardant clothing and antistatic boots.

Section 9 Physical and Chemical Properties

Appearance: White powder	Odor: No information available
Odor Threshold: No information available	pH: 14 (20 °C)
Melting Point/Freezing Point (°C): 360	Initial Boiling Point and Boiling Range (°C): 1327
Flash Point (°C)(Closed Cup): Not applicable	Evaporation Rate: Not applicable
Flammability: No information available	Upper/lower explosive limits[% (v/v)]: Upper limit: No information available; Lower limit: No information available
Vapor Pressure (KPa): Not applicable	Relative Vapour Density(Air = 1): Not applicable
Relative Density(Water=1): 2.04 (20 °C)	Solubility: 1130 g/l (20 °C)
n-Octanol/Water Partition Coefficient: No information available	Auto-Ignition Temperature(°C): No information available
Decomposition Temperature (°C): No information available	Kinematic Viscosity (mm²/s): Not applicable
Particle characteristics: No information available	

Section 10 Stability and Reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical Stability	Stable under proper operation and storage conditions.
Possibility of Hazardous Reactions	React violently with acids, phenols or alcohols. May react with strong acids, strong alkalis, strong oxidants and strong reducing agents.
Conditions to Avoid	Incompatible materials, heat, flame and spark.
Incompatible Materials	acids, phenols, alcohols and nitro substituted hydrocarbon. Strong acids, strong alkalis, strong oxidants and strong reducing agents.
Hazardous Decomposition	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

products

Section 11 Toxicological Information

> Acute Toxicity

Component	CAS No.	LD ₅₀ (Oral)	LD ₅₀ (Dermal)	LC ₅₀ (Inhalation, 4h)
Potassium carbonate	584-08-7	1870mg/kg(Rat)	No information available	No information available
Potassium hydroxide	1310-58-3	333mg/kg(Rat)	No information available	No information available

> Skin Corrosion/Irritation

Causes severe skin burns and eye damage(Category 1)

> Serious Eye Damage/Irritation

Causes serious eye damage(Category 1)

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

ID	CAS No.	Component	IARC	NTP
1	1310-58-3	Potassium hydroxide	Not Listed	Not Listed
2	584-08-7	Potassium carbonate	Not Listed	Not Listed
3	28724-32-5	Chloride	Not Listed	Not Listed
4	14808-79-8	Sulfate	Not Listed	Not Listed

> Reproductive Toxicity

No information available

> Reproductive Toxicity (Additional)

No information available

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

No information available

> Aspiration Hazard

No information available

Section 12 Ecological Information

> Acute Aquatic Toxicity

No information available

> Chronic Aquatic Toxicity

No information available

> Others

Persistence and Degradability No information available

Bioaccumulative Potential No information available

Mobility in Soil No information available

Results of PBT and vPvB Assessment

Potassium hydroxide meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.
 Potassium carbonate does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.
 Chloride does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.
 Sulfate does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Section 13 Disposal Considerations

Waste Chemicals

Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated Packaging

Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

Disposal

Refer to section 13.1 and 13.2.

Recommendations

Section 14 Transport Information

Transporting Label



Marine pollutant

None

UN Number

1813

UN Proper Shipping Name

POTASSIUM HYDROXIDE, SOLID

Transport Hazard Class

8

Transport Subsidiary Hazard Class

NONE

Packing Group

II

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Eye Damage/Irritation	Category 1

> GHS Label Elements

Pictogram



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