

SAFETY DATA SHEETS

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS) - Sixth revised edition

Version: 1.0

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SECTION 1 Identification of the substance

Product identifiers

Product name: Potassium tert butoxide

CAS-No.: 865-47-4

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

Identified uses: Laboratory chemicals, Manufacture of substances

Details of the supplier of the safety data sheet

Company: CHEMLYTE SOLUTIONS CO., LTD

Address: A1-3-830, XiXi Center, No. 588, Wenyi West Road, Hangzhou 310000, Zhejiang, China

Telephone: +86-(571)-85061365

Fax : +86-(571)-85060165

Emergency telephone number

Emergency Phone # : +1-703-527-3887

Section 2 Hazard Identification

GHS Classification:

Physical	Health	Environmental
Self-heating Substances and Mixtures: Category 1	Acute Toxicity: Oral-Category 4	No Classification
	Skin Corrosion/Irritation: Category 1B	
	Serious Eye Corrosion/Irritation: Category 1	

GHS Label:

Symbols:



Signal words: Danger

Hazard Statements:

H251 Self-heating: may catch fire.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

Precautionary Statements:

P235 Keep cool.

P260 Do not breathe dusts or mists.

P264 +P265 Wash hands [skin and eyes] thoroughly after handling. Do not touch eyes.

P270 Do not eat, drink or smoke when using this product.

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

P301+P317 IF SWALLOWED: Get medical help .

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.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P316 Get emergency medical help immediately.

P321 Specific treatment (see direct on this label).

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P407 Maintain air gap between stacks or pallets.

P410 Protect from sunlight.

P420 Store separately.

P501 Dispose of contents/container in accordance with local regulation.

Section 3 Composition/Information on Ingredients

Component	CAS Number	Weight %
Potassium Tert-Butoxide	865-47-4	≥99%
Dissociate alkali	-	≤1%

Section 4 First-aid Measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

Eye:

Flush eyes immediately with copious amounts of water for at least 15 minutes. Consult a physician.

Skin:

Flush exposed areas with water. Rinse thoroughly. Remove contaminated clothing. Consult a physician.

Inhalation:

Remove person to fresh air. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, give artificial respiration.

Ingestion:

Burning of mouth area may be reduced or eliminated through continued rinsing with water. Do not induce vomiting. Consult a physician.

Section 5 Fire-fighting Measures

Hazardous Combustion Products:

Carbon oxide, potassium oxide

Extinguishing Media:

Use carbon dioxide or dry powder to extinguish the fire, do not use foam or water to extinguish the fire.

Protective Equipment for Fire Fighting:

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6 Accidental Release Measures

Personal precautions:

Use proper personal protective equipment as indicated in Section 8. Avoid contact with skin and eyes. Keep unprotected persons away. Ensure adequate ventilation.

Environmental precautions:

Contain all spills. Keep away from drains, surface or ground water or soil.

Methods and materials for containment and cleaning up:

Small amount of leakage: Avoid dust, collect in a dry, clean, covered container with a clean shovel, and transfer to a safe place. Do not allow the product to enter restricted areas such as drains.

Large leakage: Cover with plastic sheeting and canvas. Collect and recycle using sparkless tools or transport to waste disposal sites for disposal.

Section 7 Handling and Storage

Handling Procedures:

Closed operation, local exhaust. Operators must be specially trained and strictly abide by the operating procedures. It is recommended that operators wear protective masks, anti-corrosion work clothes, and rubber gloves. Light loading and unloading during handling to prevent packing damage. Equipped with leak emergency treatment equipment. Empty containers may have harmful residues.

Storage Procedures (Conditions for safe storage, including any incompatibilities):

Store in a cool, dry, well-ventilated warehouse. Storage warehouse: Temperature $\leq 40^{\circ}\text{C}$, humidity $\leq 75\%$. Keep away from fire and heat. Prevent direct sunlight. The package must be sealed and protected from moisture. It should be stored separately from oxidizers and easy (flammable) substances, and should not be mixed. Storage areas should be equipped with suitable materials to contain leaks. Follow manufacturer's storage and disposal instructions.

Section 8 Exposure Controls/Personal Protection

Occupational exposure limit:

GBZ 2.1-2019 "Occupational Exposure Limits for hazardous agents in the workplace Chemical hazardous agents": not list.

Engineering Controls:

Properly operating chemical fume hood designed for hazardous chemicals. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

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).

Skin and 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.

Eye 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).

Hand Protection:

Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of workday. Avoid contact with the eyes and skin.

Section 9 Physical and Chemical Properties

Physical Properties: Solid

Odor: No data

Molecular Weight: 112.21

pH: No data

Boiling Point: 275 °C

Flash Point: 54 °F

Melting/Freezing Point: 256-258 °C

Auto-ignition Temperature: No data

Volatility: No data

Solubility in Water: Soluble

Decomposition temperature: No data

Partition coefficient: n-octanol/water: No data

Relative density(water=1): 0.929g

Upper/lower explosive limits: No data

Vapour pressure: No data

Vapour density(air=1): No data

Evaporation rate: No data

Section 10 Stability and Reactivity

Stability: No data available.

Conditionsto Avoid: Heat, flame, speak, moist.

Incompatible material: Water, acids, reducing agents, oxygen, alcohols, halogens, ketones.

Hazardous Decomposition Products: Carbon oxide, potassium oxide

Hazardous Polymerization: No data available.

Section 11 Toxicological Information

Acute Oral LD50 (mg/kg): Rat-690mg/kg

Acute Dermal LD₅₀ (mg/kg): No data available.

Acute Inhalation LC₅₀ (mg/m3): No data available.

Skin Corrosive/Irritation: Causes severe skin burns.

Serious Eye Damage/IrritationL: Causes serious eye damage.

Sensitization – Respiratory: No data available.

Sensitization – Skin: No data available.

Germ Cell Mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive Toxicity: No data available.

Target Organ Toxicity-single exposure: No data available.

Target Organ Toxicity-repeated exposure: No data available.

Aspiration hazard: No data available.

Section 12 Ecological Information

Biodegradability: No further relevant information available.

Aquatic Toxicity: No further relevant information available.

Bio-accumulative Potential: No further relevant information available.

General notes: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Do not allow material to be released to the environment without proper governmental permit.

Section 13 Disposal Considerations

Waste Disposal:

Dispose of in a manner consistent with local regulations. Give the remaining and unrecovered solution to the disposal company. Contact a professional waste disposal licensed organization to dispose of this substance.

Contaminated packaging: Dispose of as unused product.

Section 14 Transport Information

Maritime transport IMDG Code (41-22):

IMDG Class: 4.2(8)

UN Number: 3206

Packaging group: II

Marine pollutant: No

Proper shipping name: ALKALI METAL ALCOHOLATES, SELF-HEATING, CORROSIVE

N.O.S.(Potassium Tert-Butoxide)

Section 15 Regulatory Information

CHINA:

This product is classified as class 4.2, subsidiary risk 8 according to Regulations on the control

over safety of dangerous chemicals, General rule for classification and hazard communication of chemicals (GB13690-2009) and List of dangerous goods(GB 12268-2012).

SECTION 16 Other information

Full text of H-Statements referred to under sections 2 and 3.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Further information

The above information 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. It does not represent any guarantee of the properties of the product.