



## Safety Data Sheet

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### Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Potassium tert-butoxide

SDS No. : 6339E-2

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

Research and Development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

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### Section 2. Hazards identification

GHS classification and label elements of the product

Classification of the substance or mixture

PHYSICAL AND CHEMICAL HAZARDS

Flammable solids: Category 2

Self-heating substances and mixtures: Category 2

HEALTH HAZARDS

Skin corrosion/irritation: Category 1B

Serious eye damage/eye irritation: Category 1

Specific target organ toxicity – single exposure: Category 2 (nervous system)

Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

Specific target organ toxicity – repeated exposure: Category 1 (liver, kidney, nervous system)

(Note) GHS classification without description: Not classified/Classification not possible

Label elements



Signal word: Danger

HAZARD STATEMENT

H228 Flammable solid

H252 Self-heating in large quantities; may catch fire

H314 Causes severe skin burns and eye damage

H371 May cause damage to organs (nervous system)

H335 May cause respiratory irritation

H372 Causes damage to organs through prolonged or repeated exposure (liver, kidney, nervous system)

PRECAUTIONARY STATEMENT

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.



- P235 Keep cool.  
P240 Ground and bond container and receiving equipment.  
P241 Use explosion-proof electrical/ventilating/lighting equipment.  
P260 Do not breathe dust/fume/gas/mist/vapors/spray.  
P271 Use only outdoors or in a well-ventilated area.  
P264 Wash contaminated parts thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P270 Do not eat, drink or smoke when using this product.

**Response**

- P370 + P378 In case of fire: Use appropriate media to extinguish.  
P314 Get medical advice/attention if you feel unwell.  
P310 Immediately call a POISON CENTER/doctor/physician.  
P312 Call a POISON CENTER/doctor/physician if you feel unwell.  
P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor/physician.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
P363 Wash contaminated clothing before reuse.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Storage**

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P407 Maintain air gap between stacks or pallets.  
P410 Protect from sunlight.  
P413 Store bulk masses greater than specified value at temperatures not exceeding specified values.  
P420 Store separately.

**Disposal**

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

**Specific adverse human health effects**

See "11. Toxicological Information".

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**Section 3. Composition/information on ingredients**

Mixture/Substance selection:

Substance

Ingredient name	Content (%)	CAS No.	ENCS	Chemical formula
Potassium tert-butoxide	≥ 95	865-47-4	2-3100	C <sub>4</sub> H <sub>9</sub> KO

Note : The figures shown above are not the specifications of the product.

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**Section 4. First-aid measures**

Descriptions of first-aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED



Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF INHALED: Call a POISON CENTER/doctor/physician if you feel unwell.

**IF ON SKIN**

Take off immediately all contaminated clothing. Rinse skin with water or shower.

Immediately call a POISON CENTER/doctor/physician.

If skin irritation or rash occurs: Get medical advice/attention.

**IF IN EYES**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor/physician.

If eye irritation persists: Get medical advice/attention.

**IF SWALLOWED**

Rinse mouth.

Do NOT induce vomiting.

IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.

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## **Section 5. Fire-fighting measures**

### Extinguishing media

#### Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

In case of fire, use water mist or loaded liquid, foam, inactive gases, dry powder, dry sand to extinguish.

\*Fire Service Act Combustible solids or synthetic resins

#### Unsuitable extinguishing media

Extinguisher which discharge dry chemical fire extinguishing agents—Others (except for phosphates etc., hydrogen carbonates etc.)

\*Ministerial Ordinance for Enforcement of the Fire Service Act (Appended Table 2)

Combustible solids or synthetic resins

### Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

### Advice for firefighters

#### Specific fire-fighting measures

Evacuate non-essential personnel to safe area.

#### Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

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## **Section 6. Accidental release measures**

### Personnel precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

### Environmental precautions



Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for containment and cleaning up

Liquid: Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Solid: Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

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## Section 7. Handling and storage

### Precautions for safe handling

#### Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground and bond container and receiving equipment.

Use explosion-proof electrical/ventilating/lighting equipment.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

#### Safety Measures

Use only outdoors or in a well-ventilated area.

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

Wash hands et al thoroughly after handling.

When using do not eat, drink or smoke.

#### Any incompatibilities

See "10.Stability and Reactivity".

#### Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

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

Wash contaminated clothing before reuse.

### Storage

#### Conditions for safe storage

Keep container tightly closed.

Store locked up. (P405)

Maintain air gap between stacks or pallets.

Store bulk masses greater than specified value at temperatures not exceeding specified values.

Store in a cool, dry place. Do not store in direct sunlight.

Storage in accordance with local/national regulation.

(Incompatible storage condition)

Protect from sunlight.

Store separately.

#### Container and packaging materials for safe handling

Use closed unbreakable containers.

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**Section 8. Exposure controls/personal protection**

## Control parameters

Administrative Control Levels and Concentration standard value

Not established

Occupational Exposure Limit

The Japan Society for Occupational Health

(Other inorganic and organic dust (third class dust ))

JSOH Respirable dust 2mg/m<sup>3</sup>, Total dust 8mg/m<sup>3</sup>

## Exposure controls

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

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**Section 9. Physical and Chemical Properties**

## Information on basic physical and chemical properties

Physical state: Powder or lump

Color: White to pale yellow

Odor data is not available.

Melting point/Freezing point: 256~258°C

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Decompose

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.



Particle characteristics data is not available.

Other information

Other information is not available.

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## Section 10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Hygroscopic materials.

Possibility of hazardous reactions

Not available.

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong oxidizing agents, Water

Hazardous decomposition products

Carbon oxides, Potassium hydroxide

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## Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation

[Product]

Category 1B, Causes severe skin burns and eye damage

[Data for components of the product]

[Company proprietary data]

Category 1B

Serious eye damage/irritation

[Product]

Category 1, Causes serious eye damage

[Data for components of the product]

[Company proprietary data]

Category 1

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenic effects data is not available.

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure

[Product]

Category 2, May cause damage to organs

Category 3, May cause respiratory irritation

[Data for components of the product]

[Company proprietary data]

Category 2 (nervous system), Category 3 (Respiratory tract irritation)

STOT-repeated exposure

**[Product]**

Category 1, Causes damage to organs through prolonged or repeated exposure

**[Data for components of the product]**

[Company proprietary data]

Category 1 (liver, kidney, nervous system)

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

–e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

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**Section 12. Ecological Information**

Toxicity

Toxicity data is not available.

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

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**Section 13. Disposal considerations**

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container as industrial waste. Accordance with local/national regulation.

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**Section 14. Transport Information**

UN Number or ID Number : 3095

UN Proper Shipping Name :

CORROSIVE SOLID, SELF-HEATING, N.O.S.

Class or division (Transport hazard class) : 8

Subsidiary hazard(s) : 4.2

Packing group : II

ERG GUIDE No.: 136

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : 3095

UN Proper Shipping Name :

CORROSIVE SOLID, SELF-HEATING, N.O.S.

Class or division (Transport hazard class) : 8

Subsidiary hazard(s) : 4.2

Packing group : II

IATA (Dangerous Goods Regulations)

UN Number or ID Number : 3095



UN Proper Shipping Name :  
CORROSIVE SOLID, SELF-HEATING, N.O.S.  
Class or division (Transport hazard class) : 8  
Subsidiary hazard(s) : 4.2  
Hazard labels : Corrosive & Spont. Comb.  
Packing group : II  
Environmental hazards  
Marine pollutants (yes/no) : no

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**Section 15. Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture  
U.S. Toxic Substances Control Act (TSCA) Inventory  
Chemicals listed in TSCA Inventory  
Applicable  
Other regulatory information  
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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**Section 16. Other information**

## References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN  
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN  
IMDG Code, 2024 Edition (Incorporating Amendment 42-24)  
IATA Dangerous Goods Regulations (66th Edition) 2025  
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)  
2025 TLVs and BEIs. (ACGIH)  
JIS Z 7252 : 2019  
JIS Z 7253 : 2019  
2024 Recommendation on TLVs (JISOH)  
Supplier's data/information

## General Disclaimer

© KISHIDA CHEMICAL CO., LTD.  
Unauthorized translation or modification is prohibited.  
Please provide SDS to customers for selling or transferring.  
All chemicals have unknown hazard. Handle the product with care.  
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.  
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.  
The GHS classification data given here is based on current Data published in Japan (National Institute of Technology and Evaluation (NITE) Chemical Risk Information Platform (NITE-CHIRIP), up to FY2023).