



Safety Data Sheet

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

Product identifier:

Product name: Potassium

SDS No. : 6328E-3

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

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2. Hazards identification

GHS classification and label elements of the product**Classification of the substance or mixture****PHYSICAL AND CHEMICAL HAZARDS**

Substances and mixtures which, in contact with water, emit flammable gases: Category 1

HEALTH HAZARDS

Skin corrosion/irritation: Category 1A

Serious eye damage/eye irritation: Category 1

Label elements

Signal word: Danger

HAZARD STATEMENT

In contact with water releases flammable gases which may ignite spontaneously

Causes severe skin burns and eye damage

PRECAUTIONARY STATEMENT**Prevention**

Do not allow contact with water.

Handle and store contents under inert gas/appropriate liquid or gas. Protect from moisture.

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

Wash contaminated parts thoroughly after handling.

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

Response

In case of fire: Use appropriate media other than water to extinguish.

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

IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Wash contaminated clothing before reuse.

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

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

Store in a dry place. Store in a closed container.

**Disposal**

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

Specific Physical and Chemical hazards

May catch fire or form flammable gas in contact with water.

3. Composition/information on ingredients**Mixture/Substance selection:****Substance**

Ingredient name:Potassium

Content (%):97(min)

Chemical formula:K

CAS No.:7440-09-7

MW:39.0983

ECNO:231-119-8

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

Supplementary information concerning ingredients

Mineral Spirits \leq 10% (CAS No.64475-85-0)

Soak in paraffin,liquid (CAS No.8012-95-1). Hazard statement is explained by reference to SDS of paraffin,liquid.

4. First-aid measures**Descriptions of first-aid measures****IF INHALED**

Remove person to fresh air and keep comfortable for breathing.

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

IF ON SKIN (or hair)

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

IF ON SKIN: Brush off loose particles from skin. Immerse in cool water.

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.

If eye irritation persists: Get medical advice/attention.

IF SWALLOWED

Rinse mouth. Do NOT induce vomiting.

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

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

In case of fire, use dry powder, dry sand to extinguish.

Unsuitable extinguishing media

Indoor firefighting equipment or outdoor firefighting equipment

Sprinkler equipment

Moisture firefighting equipment or water spray firefighting equipment

Foam firefighting equipment

Inactive gas firefighting equipment

Halogenated firefighting system

Dry-powder firefighting equipment - phosphate etc.

Straight stream water extinguisher

Water mist extinguisher



Reinforcing liquid jet extinguisher
Misty reinforcing liquid extinguisher
Foam extinguisher
Carbon dioxide extinguisher
Halogenated extinguisher
Dry-powder extinguisher – phosphate etc.
Bucket of water or tank of water

Specific hazards arising from the substance or mixture
Containers may explode when heated.
Fire may produce irritating, corrosive and/or toxic gases.

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 full face piece operated positive pressure mode.

6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Methods and materials for containment and cleaning up

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

Preventive measures for secondary accident

Collect spillage.

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.

Do not allow contact with water.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

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

Handle and store contents under inert gas/appropriate liquid or gas. Protect from moisture.

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.



Wash contaminated clothing before reuse.

Storage

Conditions for safe storage

Keep container tightly closed.

Store in a dry place. Store in a closed container.

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

Keep under lock and key.

Container and packaging materials for safe handling

Glass

Polyethylene

8. Exposure controls/personal protection

Control parameters

Adopted value

(Paraffin,liquid)

ACGIH(2010) TWA: as low as possible(L) (URT irr)

OSHA-PEL

(Paraffin,liquid)

TWA: 5mg/m³

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

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state: Solid

Color: White to gray

Odor data is not available.

Melting point/Freezing point: 63.2°C

Boiling point or initial boiling point: (Potassium)765.5°C

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: Reaction

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

Vapor pressure: negligible (20°C)

Density and/or relative density: 0.856 g/cm³



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

Particle characteristics data is not available.

10. Stability and Reactivity

Reactivity

Reacts violently with water.

Chemical stability

Decomposes rapidly under the influence of air and moisture.

Possibility of hazardous reactions

Reacts violently with water. This generates fire and explosion hazard. Decomposes rapidly under the influence of air and moisture. This produces flammable/explosive gas (hydrogen).
(ICSC 0716)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Water

Hazardous decomposition products

Hydrogen

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[GHS Cat. Japan, base data]

(Paraffin,liquid)

rat LD50 > 5000mg/kg (IUCLID, 2011)

Acute toxicity (Dermal)

[GHS Cat. Japan, base data]

(Paraffin,liquid)

rat LD50 >5000mg/kg (IUCLID, 2011)

Acute toxicity (Inhalation)

[GHS Cat. Japan, base data]

(Paraffin,liquid)

mist: rat LC50=2.18mg/L (IUCLID, 2000)

Irritant properties

Skin corrosion/irritation

[GHS Cat. Japan, base data]

(Potassium)

corrosive (HSDB, 2005)

Serious eye damage/irritation

[GHS Cat. Japan, base data]

(Potassium)

severe damage (HSDB, 2005)

(Paraffin,liquid)

rabbit mild irritation (IUCLID, 2000)

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenicity

[IARC]

(Paraffin,liquid)

Group 1 : Carcinogenic to humans



[ACGIH]

(Paraffin,liquid)

A2(2010) : Suspected Human Carcinogen

Reproductive toxicity data is not available.

STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

12. Ecological Information

Ecotoxicity

Ecotoxicity data is not available.

Water solubility

(Potassium)

reaction (ICSC, 2006)

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.

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 in accordance with local/national regulation.

14. Transport Information

UN No. or ID No.: 2257

UN Proper Shipping Name :

POTASSIUM

Class or division (Transport hazard class) : 4.3

Packing group : I

ERG GUIDE No.: 138

IMDG Code (International Maritime Dangerous Goods Regulations)

UN No.: 2257

Proper Shipping Name :

POTASSIUM

Class or division : 4.3

Packing group : I

IATA Dangerous Goods Regulations

UN No.: 2257

Proper Shipping Name :

POTASSIUM

Class or division : 4.3

Hazard labels : Dang. when wet

Packing group : I

Special provisions No.: A1



Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

15. Regulatory Information

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

Chemicals listed in TSCA Inventory

Potassium; Paraffin,liquid

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

16. Other information

GHS classification and labelling

Water-react. 1: H260 In contact with water releases flammable gases which may ignite spontaneously

Skin Corr. 1A: H314 Causes severe skin burns and eye damage

Eye Dam. 1: H318 Causes serious eye damage

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2021 TLVs and BEIs. (ACGIH)

Supplier's data/information

General Disclaimer

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 Japan official data (NITE published in 2020).