



## Safety Data Sheet

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

#### Product identifier:

Product name: Phosphorus standard solution(1000mg/L)

Product code (SDS NO): H6194E-2

#### Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

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

Division: Safety Management Dept. of Chemicals

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

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### 2. Hazards identification

#### GHS classification and label elements of the product

#### Classification of the substance or mixture

(Note) GHS classification without description: Not applicable/Out of classification/Not classifiable

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### 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### Mixture

Ingredient name: Potassium dihydrogenphosphate

Content (%): 0.45

Chemical formula:  $H_2KPO_4$

Chemicals No, Japan: 1-452

CAS No.: 7778-77-0

MW: 136.09

ECNO: 231-913-4

Ingredient name: Water

Content (%): 99

Chemical formula:  $H_2O$

CAS No.: 7732-18-5

MW: 18.02

ECNO: 231-791-2

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

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### 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 or doctor/physician if you feel unwell.

##### IF ON SKIN (or hair)

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

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.

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

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**5. Fire-fighting measures**

## Extinguishing media

## Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

## 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/flame resistant/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.

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**6. Accidental release measures**

## Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

## Methods and materials for containment and cleaning up

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

## Preventive measures for secondary accident

Collect spillage.

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**7. Handling and storage**

## Precautions for safe handling

## Preventive measures

(Protective measures against fire and explosion)

Keep away from heat/sparks/open flames/hot surfaces. – No smoking.

## Exhaust/ventilator

Exhaust/ventilator should be available.

## Safety treatments

Avoid contact with skin.

Avoid contact with eyes.

## Safety Measures/Incompatibility

Wear protective gloves, protective clothing or face protection.

When using do not eat, drink or smoke.

## Conditions for safe storage, including any incompatibilities

## Recommendation for storage

Keep container tightly closed.

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

**8. Exposure controls/personal protection**

## 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.

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**9. Physical and Chemical Properties**

## Information on basic physical and chemical properties

## Physical properties

Appearance: Liquid

Color: Colorless, Clear

Odor: Odourless to almost odourless

pH data N.A.

## Phase change temperature

Initial Boiling Point/Boiling point data N.A.

Boiling range data N.A.

Melting point/Freezing point data N.A.

Decomposition temperature data N.A.

Flash point data N.A.

Auto-ignition temperature data N.A.

Explosive properties data N.A.

Vapor pressure data N.A.

Relative Vapor Density (Air=1) data N.A.

Specific gravity/Density: 1.00g/cm<sup>3</sup>

## Solubility

Solubility in water: Soluble

n-Octanol/water partition coefficient data N.A.

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**10. Stability and Reactivity**

## Reactivity

N.A.

## Chemical stability

Stable under normal storage/handling conditions.

## Possibility of hazardous reactions

(Potassium dihydrogenphosphate)

Decomposes on heating. This produces toxic gases. The solution in water is a weak acid.

(ICSC 1608)

## Conditions to avoid

Contact with fire source.

## Incompatible materials

N.A.

## Hazardous decomposition products

Phosphorus compounds, Potassium compounds

**11. Toxicological Information**

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Company proprietary data]

(Potassium dihydrogenphosphate)

rat LD50=3200 mg/kg (HSDB)

Acute toxicity (Dermal)

[Company proprietary data]

(Potassium dihydrogenphosphate)

rabbit LD50&gt;4640 mg/kg

No Irritant properties data available

No Allergenic and sensitizing effects data available

No Mutagenic effects data available

No Carcinogenic effects data available

No reproductive toxicity data available

No STOT-single/repeated exposure data available

No Aspiration hazard data available

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**12. Ecological Information**

Ecotoxicity

No Aquatic toxicity data available

Water solubility

(Potassium dihydrogenphosphate)

22 g/100 ml (ICSC, 2005)

No Persistence and degradability data available

No Bioaccumulative potential data available

No Mobility in soil data available

Ozone depleting chemical data not available

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**13. Disposal considerations**

Waste treatment methods

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

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**14. Transport Information**

Not applicable to UN No.

IMDG Code (International Maritime Dangerous Goods Regulations)

Not applicable to IMDG Code

IATA Dangerous Goods Regulations

Not applicable to IATA Dangerous Goods Regulations

Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

Transport in bulk according to Annex II of MARPOL73/78 and IBC Code

Non Noxious Liquid ; Cat. OS

Water

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**15. Regulatory Information**

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



## US major regulations

## TSCA

Water; Potassium dihydrogenphosphate

## Other regulatory information

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

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**16. Other information**

The product is not applicable to GHS classifications.

## Reference Book

Globally Harmonized System of classification and labelling of chemicals, (5th ed., 2013), UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 20th edit., 2017 UN

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

IATA Dangerous Goods Regulations (60th Edition) 2019

Classification, labelling and packaging of substances and mixtures (table3-1 ECNO6182012)

2016 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2019 TLVs and BEIs. (ACGIH)

<http://monographs.iarc.fr/ENG/Classification/index.php>

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 2017).