

MOEL's Public Notice No. 2016-19 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

WAI4 - KGHS - KOREAN

Issue Date 01-May-2015

Revision Date 05-Sep-2019

Revision Number 1

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### Product Identifier

**Product Name** Phosphate Standard

**Product No** 239520

**Pure substance/mixture** Mixture

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

**Recommended Use** Use as laboratory reagent

**Uses advised against** No Information available

### **Supplier**

|                                  |                           |
|----------------------------------|---------------------------|
| Fisher Scientific Korea          | Thermo Fisher Scientific© |
| D5,D6, Incheon Airport Logistics | Water and Lab Products    |
| Complex                          | 22 Alpha Road             |
| 150, Gonghangdong-Ro Mapo-Gu 296 | Chelmsford, MA 01824, USA |
| Beon-Gil                         | 1-978-232-6000            |
| Jung-Gu, Incheon 400-340         |                           |
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### **E-mail address**

Chem.KR@thermofisher.com info.water@thermo.com

### Emergency Telephone Number

**Emergency telephone:** Medical: +(82) 070-7686-0086 or + 1-703-741-5970  
 CHEMTREC: 1-800-424-9300 or + 1-703-527-3887  
 Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

Made in USA

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the substance or mixture

#### Physical hazards

Based on available data, the classification criteria are not met

#### Health hazards

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Based on available data, the classification criteria are not met

## **Environmental hazards**

Based on available data, the classification criteria are not met

## **Label Elements**

## **Other Hazards**

## **NFPA**

Health  
0

Flammability  
0

Instability  
0

Physical hazards  
N/A

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.2. Mixtures**

| Component                      | Common Name              | CAS-No    | Index No. | Weight % |
|--------------------------------|--------------------------|-----------|-----------|----------|
| Water                          | No information available | 7732-18-5 | KE-35400  | 99 - 100 |
| Potassium Dihydrogen Phosphate | No information available | 7778-77-0 | KE-28622  | <0.1     |

## **SECTION 4: FIRST AID MEASURES**

### **First aid measures**

#### **General Advice**

Use first aid treatment according to the nature of the injury. Get medical attention immediately if symptoms occur. Show this safety data sheet to the doctor in attendance.

#### **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### **Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### **Inhalation**

Move to fresh air. Get medical attention immediately if symptoms occur.

#### **Ingestion**

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### **Self-Protection of the First Aider**

No special precautions required.

### **Most important symptoms and effects, both acute and delayed**

#### **Most important symptoms and effects**

None reasonably foreseeable

### **Indication of any immediate medical attention and special treatment needed**

#### **Notes to Physician**

Treat symptomatically

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## SECTION 5: FIREFIGHTING MEASURES

### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Unsuitable Extinguishing Media

No information available

### Specific Hazards Arising from the Chemical

No information available.

### Explosion Data

**Sensitivity to Mechanical Impact** None

**Sensitivity to Static Discharge** None

### Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

#### Personal Precautions

Ensure adequate ventilation. Use personal protective equipment.

#### Environmental Precautions

Should not be released into the environment. See Section 12 for additional ecological information.

### Methods and Material for Containment and Cleaning Up

#### Methods for Containment

Prevent further leakage or spillage if safe to do so.

#### Methods for Cleaning Up

Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

#### Handling

Wear personal protective equipment  
Ensure adequate ventilation  
Avoid contact with skin, eyes and clothing  
Avoid ingestion and inhalation

### Conditions for Safe Storage, Including any Incompatibilities

#### Storage

Keep container tightly closed in a dry and well-ventilated place  
Store at room temperature in the original container  
Keep away from direct sunlight

#### Incompatible Products

No information available

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

| Component                      | CAS-No    | Korea      | ACGIH TLV  | OSHA PEL   |
|--------------------------------|-----------|------------|------------|------------|
| Water                          | 7732-18-5 | Not listed | Not listed | Not listed |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not listed | Not listed | Not listed |

| Component | CAS-No | European Union | The United Kingdom | Germany |
|-----------|--------|----------------|--------------------|---------|
|-----------|--------|----------------|--------------------|---------|

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|                                |           |            |            |            |
|--------------------------------|-----------|------------|------------|------------|
| Water                          | 7732-18-5 | Not listed | Not listed | Not listed |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not listed | Not listed | Not listed |

## Biological Exposure Indices

| Component                      | CAS-No    | Biological Exposure Indices |
|--------------------------------|-----------|-----------------------------|
| Water                          | 7732-18-5 | Not listed                  |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not listed                  |

## Appropriate engineering controls

**Engineering Measures** None under normal use conditions

## Individual protection measures, such as personal protective equipment

**Personal protective equipment** Use only those certified by the Korea Occupational Safety and Health Administration.

**Eye/face Protection** Wear chemical splash goggles and face shield. If splashes are likely to occur, wear:. Face-shield.

**Skin and Body Protection** Wear protective gloves/clothing.

**Respiratory Protection** None under normal use conditions. In case of inadequate ventilation wear respiratory protection.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|                |                          |
|----------------|--------------------------|
| Physical State | Liquid                   |
| Appearance     | Colorless                |
| Odor           | Odorless                 |
| Odor Threshold | No information available |
| pH             | 7.0                      |
| PH Range       | No information available |

| Property                     | Values                   | Remarks • Method |
|------------------------------|--------------------------|------------------|
| Melting point/freezing point | ~0 °C                    |                  |
| Boiling Point/Range          | ~ 100 °C / 212 °F        |                  |
| Flash Point (High in °C)     | N/A                      |                  |
| Evaporation Rate             | No information available |                  |
| Flammability (solid, gas)    | No information available |                  |
| Flammability Limit in Air    |                          |                  |
| Upper flammability limit:    | No information available |                  |
| Lower flammability limit:    | No information available |                  |
| Vapor pressure               | No information available |                  |
| Vapor Density                | No information available |                  |
| Specific Gravity             | No information available |                  |
| Water Solubility             | Soluble in water         |                  |
| Solubility in other solvents | No information available |                  |
| Partition coefficient        | No information available |                  |
| Autoignition Temperature     | -                        |                  |
| Decomposition Temperature    | No information available |                  |
| Kinematic viscosity          | No information available |                  |
| Dynamic viscosity            | No information available |                  |

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|                             |                          |
|-----------------------------|--------------------------|
| <b>Explosive Properties</b> | No information available |
| <b>Oxidizing Properties</b> | No information available |

## Other Information

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening Point</b>  | No information available |
| <b>Molecular Weight</b> | No information available |
| <b>VOC Content(%)</b>   | No information available |
| <b>Density</b>          | No Information available |
| <b>Bulk Density</b>     | No information available |

## **SECTION 10: STABILITY AND REACTIVITY**

### Reactivity

No Information available

### Chemical Stability

Stable under normal conditions

### Possibility of Hazardous Reactions

None under normal processing

### Conditions to Avoid

Extremes of temperature and direct sunlight.

### Incompatible Materials

No information available

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **Product Information**

#### Information on likely routes of exposure

|                   |  |
|-------------------|--|
| <b>Inhalation</b> | Not an expected route of exposure.             |
| <b>Ingestion</b>  | No known effect based on information supplied. |
| <b>Eyes</b>       | Not an expected route of exposure.             |
| <b>Skin</b>       | No known effect based on information supplied. |

#### Information on Toxicological Effects

|                 |                          |
|-----------------|--------------------------|
| <b>Symptoms</b> | No information available |
|-----------------|--------------------------|

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Sensitization</b>            | No information available  |
| <b>Mutagenic Effects</b>        | No information available  |
| <b>Carcinogenicity</b>          | No information available. |
| <b>Reproductive Effects</b>     | No information available  |
| <b>STOT - single exposure</b>   | No information available  |
| <b>STOT - repeated exposure</b> | No information available  |

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**Target Organs** None known.

**Aspiration hazard** No information available

## Numerical measures of toxicity - Product Information

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity

0.1% of the mixture consists of components(s) of unknown hazards to the aquatic environment

### Persistence and Degradability

No information available

### Bioaccumulation/ Accumulation

No information available

### Mobility

No information available.

### Other adverse effects

No information available

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Waste Disposal Methods** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Improper disposal or reuse of this container may be dangerous and illegal.

## SECTION 14: TRANSPORT INFORMATION

**Road and Rail Transport** Not Regulated

**IATA** Not regulated

**IMDG/IMO** Not regulated  
**Marine Pollutant** Not Applicable

**Special Precautions for User** No special precautions required

## SECTION 15: REGULATORY INFORMATION

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

**Legend:** X - Listed '-' - Not Listed

### **International Inventories**

| Component                      | CAS-No    | KECL     | TSCA | EINECS    | IECSC | DSL | NDSL | PICCS | ENCS | AICS |
|--------------------------------|-----------|----------|------|-----------|-------|-----|------|-------|------|------|
| Water                          | 7732-18-5 | KE-35400 | X    | 231-791-2 | X     | X   | -    | X     | -    | X    |
| Potassium Dihydrogen Phosphate | 7778-77-0 | KE-28622 | X    | 231-913-4 | X     | X   | -    | X     | X    | X    |

| Component | CAS-No | Seveso III Directive | Seveso III Directive | Rotterdam | Basel Convention |
|-----------|--------|----------------------|----------------------|-----------|------------------|
|-----------|--------|----------------------|----------------------|-----------|------------------|

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|                                |           | (2012/18/EC) -<br>Qualifying Quantities<br>for Major Accident<br>Notification | (2012/18/EC) -<br>Qualifying Quantities<br>for Safety Report<br>Requirements | Convention (PIC) | (Hazardous Waste) |
|--------------------------------|-----------|---|--|------------------|-------------------|
| Water                          | 7732-18-5 | Not applicable  | Not applicable   | Not applicable   | Not applicable    |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable  | Not applicable   | Not applicable   | Not applicable    |

| Component                      | CAS-No    | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential |
|--------------------------------|-----------|----------|------------------------------|---------------------------|
| Water                          | 7732-18-5 | Listed   | Not applicable               | Not applicable            |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Listed   | Not applicable               | Not applicable            |

## Korean National Regulations

| Component                      | CAS-No    | Act on Registration and Evaluation of Chemical Substances (K-REACH) | Authorised Chemicals | Existing Substances Subject to Registration |
|--------------------------------|-----------|---|----------------------|---|
| Water                          | 7732-18-5 | Annex 1 - KE-35400 Exempt (Index No. 25)                            | Not applicable       | Not applicable                              |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Annex 1 - KE-28622  | Not applicable       | Not applicable                              |

| Component                      | CAS-No    | Chemical Control Act - Toxic Chemicals | Chemical Control Act - Prohibited Chemicals | Chemical Control Act - Use Restricted Chemicals |
|--------------------------------|-----------|--|---|---|
| Water                          | 7732-18-5 | Not applicable                         | Not applicable                              | Not applicable                                  |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable                         | Not applicable                              | Not applicable                                  |

| Component                      | CAS-No    | Chemical Control Act - Accident Precaution Chemicals (% in mixtures) | Chemical Control Act - Accident Precaution Chemicals - Quantity limits Storage (% in mixtures) | Chemical Control Act - Accident Precaution Chemicals - Quantity limits Manufacture/Use (% in mixtures) |
|--------------------------------|-----------|--|--|--|
| Water                          | 7732-18-5 | Not applicable   | Not applicable   | Not applicable   |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable   | Not applicable   | Not applicable   |

| Component                      | CAS-No    | Waste Control Law | Ministry of Environment - CMR risk | Ministry of Environment - Critically Controlled Substance |
|--------------------------------|-----------|-------------------|------------------------------------|---|
| Water                          | 7732-18-5 | Not applicable    | Not applicable                     | Not applicable  |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable    | Not applicable                     | Not applicable  |

| Component                      | CAS-No    | ISHA - Harmful Agents Subject to Work Environment Monitoring | ISHA - Prohibited substances | ISHA - Substances requiring permission |
|--------------------------------|-----------|--|------------------------------|--|
| Water                          | 7732-18-5 | Not applicable   | Not applicable               | Not applicable                         |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable   | Not applicable               | Not applicable                         |

| Component                      | CAS-No    | ISHA - Substances subject to control | ISHA - Harmful Agents Requiring Health Examination | ISHA - Permissible Exposure Limits |
|--------------------------------|-----------|--------------------------------------|--|------------------------------------|
| Water                          | 7732-18-5 | Not applicable                       | Not applicable                                     | Not applicable                     |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable                       | Not applicable                                     | Not applicable                     |

| Component                      | CAS-No    | ISHA - Subject to Process Safety Reports (minimum quantity) | ISHA - Threshold Limit Values (TLVs) Chemicals | ISHA - Special management materials |
|--------------------------------|-----------|---|--|-------------------------------------|
| Water                          | 7732-18-5 | Not applicable  | Not applicable                                 | Not applicable                      |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable  | Not applicable                                 | Not applicable                      |

National Fire Association - Dangerous Substances Minimum quantity requiring a permit

| Component | CAS-No | Class 1 - | Class 2 - | Class 3 - | Class 4 - | Class 5 - | Class 6 - |
|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|
|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|

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|                                |           | Oxidising solids | Flammable solid | Spontaneously Combustible Substances and Dangerous Substances When Wet | Flammable liquids | Self-reactive substances | Oxidising liquids |
|--------------------------------|-----------|------------------|-----------------|--|-------------------|--------------------------|-------------------|
| Water                          | 7732-18-5 | Not applicable   | Not applicable  | Not applicable   | Not applicable    | Not applicable           | Not applicable    |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable   | Not applicable  | Not applicable   | Not applicable    | Not applicable           | Not applicable    |

## Control Parameters

| Component                      | CAS-No    | Korea      | Biological Exposure Indices |
|--------------------------------|-----------|------------|-----------------------------|
| Water                          | 7732-18-5 | Not listed | Not listed                  |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not listed | Not listed                  |

## US Management Information

OSHA - Occupational Safety and Health Administration

Not applicable

| Component                      | CAS-No    | Specifically Regulated Chemicals | Highly Hazardous Chemicals |
|--------------------------------|-----------|----------------------------------|----------------------------|
| Water                          | 7732-18-5 | Not applicable                   | Not applicable             |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable                   | Not applicable             |

CERCLA Not applicable

| Component                      | CAS-No    | CERCLA EHS RQs | Hazardous Substances RQs | SARA 313 - Threshold Values % |
|--------------------------------|-----------|----------------|--------------------------|-------------------------------|
| Water                          | 7732-18-5 | Not applicable | Not applicable           | Not applicable                |
| Potassium Dihydrogen Phosphate | 7778-77-0 | Not applicable | Not applicable           | Not applicable                |

## CLP Classification - Regulation (EC) No 1272/2008

Based on available data, the classification criteria are not met.

## SECTION 16: OTHER INFORMATION

|                     |                                |
|---------------------|--------------------------------|
| Prepared By         | Regulatory Affairs             |
| Prepared For        | Thermo Fisher Scientific Inc.© |
| Issue Date          | 01-May-2015                    |
| Revision Date       | 05-Sep-2019                    |
| Reason for revision | Initial Release.               |

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**End of Safety Data Sheet**