

Material Safety Data Sheet

1. Product and company identification

Product name	Phosphate equimolar pH Standard Solution, pH6.86
Name of manufacturer	Bell Science Co., Ltd
Address	3-2-5, Koyata, Iruma-city, Saitama 358-0031 Japan
Name of section	Product management division
Telephone number	+81-42-960-6686
Facsimile number	+81-42-960-6687
MSDS No.	ph7004

2. Composition/Information on ingredients

Substance/Mixture	Mixture
Chemical name or commercial name	Potassium dihydrogenphosphate, Disodium hydrogenphosphate
Ingredients and composition	Water solution contains 0.34%(0.025mol/l) Potassium dihydrogen phosphate, 0.35%(0.025mol/l) disodium hydrogen phosphate
Chemical formula	Potassium dihydrogenphosphate KH_2PO_4 Disodium hydrogenphosphate Na_2HPO_4
CAS No.	Potassium dihydrogenphosphate 7778-77-0 Disodium hydrogenphosphate 7558-79-4

3. Summary of danger and Hazard

Adverse human health hazards	As the product is thin water solution of potassium dihydrogen phosphate and sodium dihydrogen phosphate, this solution does not have particular harmful effect.
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Environmental effects	Nothing particular
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Physical and Chemical hazards	Noncombustible and does not have particular physical and chemical hazards.
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4. First aid measures

Inhalation	Remove the victim to fresh air, and make him blow his nose and gargle.
Skin contact	Wash the affected areas under running water.
Eye contact	Wash the affected areas under running water.
Ingestion	Give the victim water immediately.

5. Fire fighting measures

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|--------------------------|--|
| Extinguishing media | This product is noncombustible. |
| Particular fire fighting | Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area. |
6. Accidental release measures
- | | |
|--------------------------|---|
| Cautions for personnel | If necessary, wear proper protective equipment. |
| Cautions for environment | Nothing particular |
| Removal measure | Absorb spill with paper or cloth. |
7. Cautions of handling and storage
- | | |
|-------------------------------------|---|
| Handling | |
| Engineering measures | Avoid contact with skin. |
| Storage | |
| Adequate storage condition | Store in a dark, cool place and tightly closed. |
| Safety adequate container materials | |
| | Glass, polyethylene, polypropylene |
8. Exposure control/Personal protection
- | | |
|----------------------------------|--|
| Engineering measures | Install a local ventilation system under dense vapor or dusty condition. |
| Control parameters | Not established |
| Protective equipment | |
| Respiration protective equipment | |
| | Not necessary |
| Hands protective equipment | If necessary, wear gloves. |
| Eyes protective equipment | If necessary, wear goggles. |
9. Physical and chemical properties
- | | |
|---|------------------------|
| Appearance | Liquid |
| Color | Colorless |
| Odor | Odorless |
| pH | 6.86 at 25°C |
| Specific temperature or temperature range of physical conditions change | |
| Boiling point | Approx. 100°C |
| Melting point | Approx. 0°C |
| Flash point | Noncombustible |
| Specific gravity | Approx. 1g/ml(at 20°C) |
| Solubility | |
| Solubility in solvents | Water: Freely soluble |
10. Stability and reactivity
- | | |
|-------------------------|----------------------------|
| Stability | Stable under normal usage. |
| Incompatible conditions | Light, heat |

11. Toxicological information

Acute toxicity	The product is thin potassium hydrogen phthalate solution and does not have particular human health hazards. Rat intraperitoneal LD ₅₀ =1000mg/kg Rabbit intravenous LD ₅₀ =1075mg/kg
Local effect	
Irritation to skin, eyes	(as Disodium hydrogen phosphate) nothing particular Rabbit skin 500mg/24H Mild
Allergenic and sensitizing effects	Not available
Chronic and long term toxicity	Not available
Carcinogenic effects	Listed on neither IARC nor NTP.
Mutagenicity	Not available
Teratogenic effects	Not available
Effects on the reproductive system	Not available

12. Ecological information

Mobility	Not available
Reliability and degradability	Not available

13. Disposal consideration

Residual disposal	Dilute the chemical with a large amount of water and flush in drains after confirming pH of the solution. Or consult approved disposal companies.
Containers	In case of disposal of empty bottles, dispose bottles after removing the content thoroughly.

14. Transport information

UN class	Not applicable
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The information contained herein is based on several references and the present state of our knowledge. However the MSDS does not always cover all information about the product, handle the product carefully.

The information is intended to ordinary usage, in case of particular handling, conduct appropriate safety measurements.

The information herein is only provision of information, and it does not represent a guarantee the properties of the product.