	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	1/9

1. Product and Company Identification

A. Product name : Monobasic Potassium Phosphate

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

- Recommended Use : pH adjusters for food manufacture, nourishing agent for yeast, binding agent for meat processing, taste improving agent for seasoning, quality improvement for meat processing, frozen and refrigerated seafood product processing, buffering agent, neutralizing agent, metal-surface finishing agent, fertilizer.

- Usage Limits : No data available

C. Details of the supplier of the safety data sheet

- Company : Youngjin co. ltd.
- Address : 38, Ojeong-ro, Ojeong-gu, Bucheon-si, Gyeonggi, Korea
- Department : Quality Control Department
- Telephone : 82-32-674-4221

2. Hazards Identification

A. Hazards Identification Classification

- Acute oral toxicity : classification 4
- Skin corrosive or irritative substance : classification 2
- Severe eye damage or Eye irritative substance : classification 2
- Specific target organ toxicity (single exposure) : classification 3 (Respiratory System Irritation)

B. Warning marks

- Pictorial symbol




- Signal word: Warning

- Hazardous expression

H302 Hazardous if swallowed.

H315 Causes skin irritation

	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	2/9

H319 Causes severe irritation to eyes

H335 May cause irritation in Respiratory System

○ Precaution expression

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke while using this product.

P271 Handle only in exterior or well-ventilated place.

P280 Wear protective gloves/protective clothing/ eye protection/face protection.

○ Respond

P301+P312 If swallowed and uncomfortable, consult medical personnel.

P302+P352 If on skin, rinse skin with much water

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 If uncomfortable, consult medical personnel.

P332+P313 If irritative on skin, consult medical personnel

P337+P313 If irritation to eyes continues, consult medical personnel

P362+P364 Take off contaminated clothing and wash before reuse.

○ Storage

P403+P233 Store container in well-ventilated place and securely airtight.

○ Disposal

P501 Dispose of container in conformity with relevant regulations.

Dispose of container by incineration as general industrial waste.

Put contents in polyethylene bag or similar bag and bury in managed landfills.


Recycle container as polyethylene according to Waste Control Act clause 13-2.

C. NFPA Rating (0-4 level): Health=1, Fire=0, Reactivity=0

3. Composition, Information on Ingredients

Chemical Name	Idiomatic name	Percent (%)	CAS No.
Monobasic Potassium Phosphate	Monobasic Potassium Phosphate	100%	7778-77-0

4. First Aid Measures

 (주)영진	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	3/9

A. Eye Contact

- Rinse cautiously with water for several minutes. Remove contact lenses, continue rinsing.
- If irritation to eyes continues, consult medical personnel.

B. Skin Contact

- Prevent spread of contaminated area if skin contact is slight.
- Take emergency medical service.
- If the material is hot, soak affected area in a great quantity of cold water and wash to remove heat.
- In case of skin contact, rinse skin and eyes with running water for more than 20 minutes immediately.
- Remove contaminated clothing and shoes. Isolate contaminated area.
- Take off contaminated clothing and wash before reuse.
- If irritative on skin, take medical personnel.

C. Inhalation

- If exposed to excess dust or fume, wash clear air. If there are cough or other symptoms, take medical action.

D. Ingestion

- If the person ingested or inhaled the material, do not mouth-to-mouth resuscitation and use proper medical respiratory equipment.
- If swallowed and uncomfortable, consult medical personnel.
- Wash out mouth.

E. Other medical notices.

- Let medical personnel recognize the material and take protective measure.


5. Explosion / Fire Fighting Measures

A. Appropriate (and inappropriate) Extinguishing Media

- Use alcohol foam, carbon dioxide or water spray.
- If extinguishing by smothering, use dry sand or earth.

B. Specific Hazards in Presence of Chemical Substances

- If boiled, container may explode.
- Nonflammable, but material can decompose and generate corrosive and toxic fume if boiled.
- May burn partly, does not ignite easily.
- While burning, thermal decomposition or combustion can generate irritative and highly

	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	4/9

hazardous gas.

C. Precaution and Protective equipments for Fire Fighting

- Rescuer should use appropriate protective equipment.
- Dig a ditch to dispose fire fighting water and keep material not dispersed.
- Be cautious. Substance may be carried in molten state.
- If not dangerous, move container from fire area.
- Keep proper distance while extinguishing.
- Fire involving Tanks; In case of great fire, use unmanned fire apparatus. If impossible, step back and leave them burn.
- Fire involving Tanks; After extinguish, cool down container with water spray for considerable time
- Fire involving Tanks; Step back immediately if pressure relief device makes loud sound or tank discolors.
- Fire involving Tanks; Extinguish fire in maximum range or use unmanned fire apparatus in case of tank fires.
- Fire involving Tanks; Do not approach tank in flames.

6. Accidental Release Measures

A. Require measures and protection to protect human body

- Do not inhale dust, smoke, gas, mist, steam, spray.
- Remove all ignition sources.
- Clear spilth immediately, follow precaution of Personal Protection section.
- If not dangerous, stop any leakage.
- Do not touch broken container or leaked material without appropriate protective clothing.
- Use plastic sheet to stop spreading.
- Take notice of material and condition to avoid.


B. Required measures to protect environment

- Prevent of inflow into waterway, drain, basement, or closed space.

C. Purification or removal method

- Absorb spilth with inactive material(e.g. dry sand or earth), put into chemical waste container.
- Absorb spilt liquid and wash out contaminated area with detergent and water.

7. Handling & Storage

	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	5/9

A. Safe handling

- Do not inhale dust, smoke, gas, mist, steam, spray.
- Open cap carefully.
- Work in reference to Engineering Controls and Personal Protection.
- Handle only in exterior or well-ventilated place.
- Follow all precautions of MSDS/LABEL though container is emptied. Product residues can rest.
- Do not eat, drink, or smoke while using this product.
- Prevent long term or continuous skin contact.
- Wash thoroughly after handling.
- Use carefully taking notice of Handling & Storage.
- Pay attention to Conditions and Materials to Avoid.

B. Safe Storage

- Drain the water out from an empty drum and close properly and put it back to drum regulator or place appropriately.
- Store container in well-ventilated place and securely airtight.
- Keep away from food and beverage.

8. Exposure Controls & Personal Protection

A. Chemical Exposure Limits, Biological Exposure Limit


- Korean Regulation : No data available
- ACGIH Regulation : No data available
- Biological Exposure Limit : No data available

B. Engineering Controls

- If dust, fume or mist is generated while operating, ventilate to maintain air pollution lower than exposure limit.
- Install facility to clean and wash up nearby working place for emergency.

C. Personal Protective Equipment

- Respiratory Protection
 - Use respiratory protective equipment that is appropriate to exposed material's physical & chemical properties and authorized by Korean Occupational Safety and Health Act.
- Eyes Protection : Wear dust-proof safety goggles.
- Hands Protection : Wear appropriate chemical-resistant gloves.
- Body Protection : Wear appropriate chemical-resistant apron and boots.


	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	6/9

9. Physical & Chemical Properties

- A. Appearance: Solid crystallized powder.
- B. Odor: None.
- C. Odor Threshold : None
- D. PH: 1% solution pH4.2~4.7
- E. Melting point/Freezing point: 253°C / No data available.
- F. Initial Boiling point and Boiling point range: N/A
- G. Flash point: No data available.
- H. Evaporation Rate: No data available.
- I. Flammability (solid, gas): nonflammable.
- J. Low & Upper limit of Flammable or Explosion Range: N/A.
- K. Vapor Pressure: N/A
- L. Solubility: (1) Solubility in water : 18% at 25°C
(2) Insoluble in Alcohol.
- M. Vapor Density: N/A
- N. Specific Gravity: 2.338(Water=1)
- O. n-Octanol/water partition coefficient: None.
- P. Auto-ignition Temp.: No data available.
- Q. Decomposition Temp.: No data available.
- R. Viscosity: No data available
- S. Molecular Weight : 136.09

10. Stability & Reactivity

- A. Chemical stability and Possibility of hazardous reactions
 - If boiled, container may explode.
 - May burn partly, does not ignite easily.
 - Material is nonflammable and does not burn itself, but can decompose and generate corrosive and toxic fume if boiled.
 - Fire causes irritative, corrosive, toxic gas from material.
- B. Conditions to Avoid : Ignition sources like heat, sparks, and fire.
- C. Materials to Avoid : Inflammable materials, reductive materials.
- D. Hazardous Decomposition Products :
 - While burning, thermal decomposition or combustion can generate irritative and highly

	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	7/9

poisonous gas.

- Corrosive and toxic fume.

11. Toxicological Information

A. Information about possible exposure route : No data available.

B. Health effect

○ Acute oral toxicity:

- ORAL : LD50 1700 mg/kg Mouse
- SKIN : LD50 > 4640 mg/kg Rabbit
- Inhalation : No data available.

○ Skin corrosivity or irritation : Causes skin irritation.

○ Severe eye damage or irritation : Causes eyes irritation.

○ Respiratory sensitization : No data available

○ Skin sensitization : No data available

○ Carcinogenesis

- Occupational Safety and Health Act : No data available
- Ministry of Employment and Labor : No data available
- IARC : No data available
- OSHA : No data available
- ACGIH : No data available
- NTP : No data available
- EU : No data available
- CLP : No data available

○ Gamete Mutagenicity : No data available

○ Reproductive toxicity : No data available

○ Specific target organ toxicity (single exposure) : Causes respiratory irritation


○ Specific target organ toxicity (repeated exposure) : No data available

○ Aspiration Hazard : No data available

12. Ecological Information

A. Aquatic & Eco-toxicity:

- Fish : LC₅₀ 40400000 mg/l 96 hr
- Crustacean : LC₅₀ 2.4 mg/l 28 hr

	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	8/9

- Algae : EC₅₀ 12700000 mg/l 96 hr
- B. Residue property and degradability
 - Residue property : log Kow -3.96
 - Degradability : No data available
- C. Bioaccumulative potential
 - Bioaccumulation : No data available
 - Biodegradation : No data available
- D. Movement in soil : No data available.
- E. Other hazardous effect : No data available.

13. Disposal Considerations


- A. Disposal method
 - Dispose of contents/container according to Waste Control Act(if specified).
- B. Disposal Considerations
 - Dispose of container according to relevant regulation.

14. Transport information

- A. UN Number : No data available
- B. UN proper shipping name : N/A
- C. UN hazardous ranking : N/A
- D. Un package group : N/A
- E. Marine pollutant : No data available
- F. Special precautions:
 - In case of fire : N/A
 - in case of leakage : N/A

15. Regulatory Information

- A. Regulation by Occupational Safety and Health Act : N/A
- B. The Chemicals Control Act : N/A
- C. Dangerous Material Safety Management Regulation : N/A
- D. Waste Control Act : N/A
- E. Other regulation by Korea and foreign acts

 (주)영진	Material Safety Data Sheet(MSDS-GHS)	Date of establishment	June, 3, 1996.
	Monobasic Potassium Phosphate	Date of revision	April, 3, 2017.
		Page	9/9

- Korean Regulation

Persistent organic pollutants control acts : N/A

- Foreign Regulation

U.S.A management information(OSHA Regulation) : N/A

U.S.A management information(CERCLA Regulation) : N/A

U.S.A management information(EPCRA 302 Regulation) : N/A

U.S.A management information(EPCRA 304 Regulation) : N/A

U.S.A management information(EPCRA 313 Regulation) : N/A

U.S.A management information(Rotterdam Protocol) : N/A

U.S.A management information(Stockholme Protocol) : N/A

U.S.A management information(Montreal Protocol) : N/A

EU classification information(Classification) : N/A

EU classification information(Risk Phases) : N/A

EU classification information(Safety Phrases) : N/A

16. Other Information

A. Data Source : Korean Occupational Safety and Health Act.

B. Date of establishment : June, 3, 1996.

C. Revision Number and recent revision date : Rev. No.6 / April, 3, 2017.

D. Others : None.