

FARM-AG INTERNATIONAL (Pty) Ltd

P.O. Box 1523, Durban 4000

Head Office : 61 Marshall Dr., Old Mill Industrial Park, Mount Edgecombe **South Africa**

Registration Number: 2005/011761/07

Tel + 27 31 003 3486 • Fax + 27 31 502 5825

SECTION 1 - PRODUCT & COMPANY IDENTIFICATION

Product Name: Mono Potassium Phosphate
Product Use: Fertilizer
Effective Date: March 2016
Revision Date: March 2021

24 Hr Emergency Number: 082 771 2712

In case of poisoning:

Poison Information Centre: 082 446 8946

Tygerberg Hospital: (021) 931 6129

Poison Emergency Enquiries (021) 689 5227

In case of Spillage:

HAZMAT: 0800 147 112

SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Common Name: Monobasic potassium phosphate, monopotassium monophosphate
potassium acid phosphate, potassium biphosphate;

Chemical Name: Potassium dihydrogen phosphate (IUPAC)

CAS No.: 7778-77-0

Use: Agricultural Micronutrient Fertilizer

Formulation: **Potassium 282 g/kg**

Phosphate 227 g/kg

Symbol: Not regulated

Indication of Danger: Not available

RISK-PHRASE(S) Not classified as dangerous according to the criteria of regulation (EC) No 1272/2008

SECTION 3 - HAZARD IDENTIFICATION**Toxicity class:**

Not regulated

Emergency:

May cause irritation to skin, eyes, and respiratory tract. May be harmful if swallowed or inhaled.

Potential Health Effects

Inhalation: Mono Potassium Phosphate may cause mild irritation to the respiratory tract.

Ingestion: Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Such effects, however, have occurred. Symptoms may include vomiting, lethargy, diarrhea, blood chemistry effects, cardiac effects and central nervous system effects. The toxicity of phosphates is because of their ability to sequester calcium. Acute potassium intoxication by mouth is rare because large single doses usually induce vomiting and because in the absence of pre-existing kidney damage, potassium is rapidly excreted. Potassium poisoning can result in heart effects, change in respiration rate, tingling in the extremities, heaviness in the limbs, nausea and diarrhea.

Skin Contact: Monopotassium Phosphate is irritant due to its acidic nature. Mono Potassium Phosphate may cause inflammation and pain on prolonged contact, especially with moist skin.

Eye Contact: Mono Potassium Phosphate may cause irritation, redness and pain.

Chronic Exposure: Monopotassium Phosphate may sequester calcium and cause calcium phosphate deposits in the kidneys.

Aggravation of Pre-existing Conditions: Persons with impaired kidney function may be more susceptible to the effects of Monopotassium Phosphate.

SECTION 4 - FIRST AID MEASURES AND PRECAUTIONS**4.1. Description of first aid measures**

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

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- Ingestion:** If Mono Potassium Phosphate is swallowed, give several glasses of water to drink to dilute. If large amounts were swallowed or symptoms occur, get medical advice. Never give anything by mouth to an unconscious person.
- Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.
- Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists..

4.2. Indication of any immediate medical attention and special treatment needed

Follow the advices in chapter 4.1. Treat symptomatically.

SECTION 5 - FIRE-FIGHTING MEASURES

Flash point: Not Flammable

Extinguishing agents:

Extinguish fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray as a fog can be used for cooling of unaffected stock, but avoid water coming in contact with the product. Contain water used for fire-fighting for later disposal. Avoid the accumulation of polluted run-off from the site.

Fire:

Monopotassium Phosphate is not considered to be a fire hazard.

Explosion:

Mono Potassium Phosphate is not considered to be an explosion hazard.

Fire Extinguishing Media:

Use any means suitable for extinguishing surrounding fire over Monobasic Potassium Phosphate Monobasic.

Personal protective equipment:

Fire-fighters and others that may be exposed should wear full protective impervious clothing, including gloves and eye protection, and self-contained breathing apparatus. Contact with the fumes and vapours should be avoided by staying upwind. Clean all clothing before re-use. Severely contaminated clothing cannot be adequately decontaminated, and must be disposed as a hazardous waste. Shower with soap and water after contact with this product.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal precautions:

Avoid contact with skin and eyes. Do not inhale spray or fumes. For personal protection see Section 8.

Environmental precautions:

Do not allow entering drains or watercourses. Spillage or uncontrolled discharges into water courses (or public waters) to be reported immediately to the Police and to the Department of Water/Environmental Affairs.

Occupational spill:

For small liquid spills, soak up with lime, damp earth or sand, or other non-combustible absorbent material and place into containers for later disposal. For large liquid spills, contain the liquid for later disposal. In situations where product comes in contact with water, contain contaminated water for later disposal. Do not flush spilled material into drains. Keep spectators away.

SECTION 7 - HANDLING AND STORAGE REQUIREMENTS

Handling:

Harmful if swallowed. Irritant to eyes and skin. Avoid contact with eyes and skin, and inhalation of dust, spray and vapour. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing.

Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Keep out of reach of unauthorized persons, children and animals. Store in its original labelled container in shaded, well-ventilated area. Store in dry area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

Specific end use(s): Fertilizers.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

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Comply with occupational safety, environmental, fire, and other applicable regulations.

PERSONAL PROTECTIVE EQUIPMENT:**Respirator:**

Where exposure through inhalation may occur when handling and/or when preparing the spray mixture, wear a face mask. If the product is used in dusty or confined conditions or spillage and fire conditions a respirator suitable for protection from dusts and mists of pesticides is adequate.

Clothing:

Employee must wear appropriate protective (impervious) clothing, boots, hat and equipment to prevent repeated or prolonged skin contact with this substance. Do not wear leather clothing.

Gloves:

Employee must wear appropriate chemical resistant protective gloves to prevent contact with this substance.

Eye protection:

The use of safety goggles (full-face shield) is recommended.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Appearance:	White granular powder.
Odor:	Odorless.
Solubility:	Soluble 22 g in 100 g of water.
Density:	2.34
pH:	No information found.
% Volatile by volume @ 21C (70F):	0
Boiling Point:	400°C (752°F) Loses water and becomes metaphosphate
Melting Point:	253°C (487°F)

SECTION 10 - STABILITY AND REACTIVITY

Storage stability: The product is stable at normal handling- and storage conditions.

Stability: Mono Potassium Phosphate is stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Phosphorus oxides may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

Incompatibilities: No known

Conditions to Avoid: No information found.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute oral LD₅₀ : >4640 mg/kg skin (rabbit).

Inhalation: May cause mild irritation to the respiratory tract.

Ingestion: Harmful if swallowed

Skin Contact: Irritant due to its acidic nature.

Eye Contact: May cause irritation

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Fate: No Available

Environmental Toxicity: No Available

SECTION 13 - DISPOSAL CONSIDERATION**Pesticide and container disposal:**

Pesticide disposal: Open dumping or burning of this pesticide is prohibited. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Do not contaminate rivers, dams or any other water sources with the product or used containers.

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Emptied containers/bags retain vapour and product residues. Observe all labelled safeguards until container is destroyed. Empty the container/bag of excess product into the mixing tank or spray tank of the applicator. Destroy the emptied containers/bags by perforation and flattening. Bury in an approved dumpsite. Do not re-use the empty container/bag for any other purpose. Comply with any local legislation applying to disposal.

Prevent contamination of food, feedstuffs, drinking water and eating utensils.

SECTION 14 - TRANSPORT INFORMATION

UN NUMBER: Not regulated

Road Transport ADR/IRD: Not regulated

Air Transport ICAO/IATA: Not regulated

Maritime Transport IMDG/IMO: Not regulated

SECTION 15 - REGULATORY INFORMATION

Risk phrase(s):

R 20/22 Harmful by inhalation and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety phrases:

S 1/2 Keep out of reach children.

S 13 Keep away from food, drink and animal feeding stuffs.

S 22 Do not breathe dust.

S 24/25 Avoid contact with skin and eyes.

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

SECTION 16 - OTHER INFORMATION

Packaging:

Packed in 0.5 kg, 01 kg, 02 kg, 05 kg, 20 kg and 25 kg paper bags or plastic containers and labeled according to South African regulations and guidelines.

Disclaimer:

The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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