



LUXEMBOURG

SAFETY DATA SHEET

Issue date: 29/04/2015

1. Identification of the substance or mixture and of the supplier

Product: Potassium phosphite
Chemical name: Potassium salts of phosphorous (phosphonic) acid
Synonyms: Potassium phosphonates
Commercial product name: ProPhyt®
EPA registration number: 42519-22
Recommended use: Fungicide
Supplier: Luxembourg-Pamol, Inc.
3647 Willowbend Boulevard, Suite 810
Houston, TX 77054, USA
Tel: 877-343-4239

Manufacture: Luxembourg Industries Ltd.
27 Hamered St., Tel Aviv, 6812509
ISRAEL

Emergency phone number: +972 3 796 4300
For USA Only: 1-800-424-9300

ProPhyt® is a registered trademark of Luxembourg

2. Hazards identification

Classification of the product (two classifications are presented: a. according to Global Harmonized System of Classification and Labelling of Chemicals (GHS, *fifth revised edition, 2013*) and b. according to OSHA HCS 2012, 29 C.F.R. § 1910.1200

a. ACCORDING TO GHS

Hazard classification: Acute toxicity, Dermal Category 5
Label elements: Pictogram: No symbol Signal word: Warning
Hazard statement(s): H313 May be harmful in contact with skin.

Precautionary statement(s):

Prevention: No prevention statements.
Response: P312 Call a POISON CENTER/doctor/physician if you feel unwell.
Storage: No storage statements.
Disposal: No disposal statements.

Potassium phosphite SDS
Page 1 of 7

LUXEMBOURG-PAMOL, INC.

b. ACCORDING TO OSHA HCS 2012, 29 C.F.R. § 1910.1200

Hazard(s) identification:	Non-hazardous.
Hazard statement:	No Hazard statements.
Signal word:	No Signal word.
Pictogram:	No Pictogram.
Precautionary statements:	
Prevention:	No prevention statements.
Response:	No response statements.
Storage:	No storage statements.
Disposal:	No disposal statements.
Hazards Not Otherwise Classified (HNOC):	Not known.

3. Information on ingredients contributing to hazard

Chemical name:	Mono- and Di-Potassium salts of phosphorous (phosphonic) acid
Common name:	Potassium phosphite
Chemical formula:	KH_2PO_3 + K_2HPO_3
Structural formula:	$\begin{array}{c} \text{O} \\ \parallel \\ \text{OH}-\text{P}-\text{OK} \\ \\ \text{H} \end{array} + \begin{array}{c} \text{O} \\ \parallel \\ \text{KO}-\text{P}-\text{OK} \\ \\ \text{H} \end{array}$
CAS No.:	13977-65-6 + 13492-26-7
Content:	Potassium phosphite: 52.9-56.1% Phosphorous acid equivalent : 33.3- 35.3%

4. First-aid measures

- Ingestion:** Call a poison control center or doctor immediately for treatment advice.
Have person sip a glass of water if able to swallow.
Do not induce vomiting unless told to do so by a poison control center or doctor.
Do not give anything to an unconscious person.
- Inhalation:** Although exposure by inhalation is less likely to be a health concern, remove victim from exposure by moving to an area of fresh air.
If breathing is difficult or absent, send for immediate medical attention.

- Eyes:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
- Skin:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Most important symptoms and effects, both acute and delayed.

No significant health effects known, or anticipated, by any route of exposure when exposed to the product as shipped.

Indication of any immediate medical attention and special treatment needed.

No specific antidote.

In the event of an adverse response, treatment should be directed toward control of the symptoms and the clinical condition of the patient.

5. Fire-fighting measures

- Suitable extinguishing media:** Dry chemical, CO₂, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material.
- Specific hazards arising from the substance or mixture:** Hazardous combustion products: Phosphorous oxides.
- Special protective equipment and precautions for firefighters:** Clear fire area of all non-emergency personnel. Stay upwind of fire. Wear chemical protective clothing and self-contained breathing apparatus (SCBA) with positive pressure.

6. Accidental release measures

- Personal precautions, protective equipment:** Use personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry from unnecessary and unprotected personnel.
- Environmental precautions:** Keep children and domestic animals off treated areas. Do not apply directly to water. Do not discharge into drains/surface waters/groundwater. Do not contaminate water by cleaning of equipment or disposal waste. Do not contaminate waters used for domestic purposes, or by wildlife, including aquatic life, or for irrigation.

Methods and materials for

containment and cleaning up:

Stop leak if possible. Contain spilled product with an inert diking material, such as sand. Cover the spill area with a 1:1 mixture of vermiculite and solid calcium oxide (the amount of the mixture should be at least double the size of the spill). Place reclaimed product in a closed and properly labeled waste drum. Store drum in separate area until proper disposal. Flush residue with water. Wash thoroughly after handling.

7. Handling and storage

Precautions for safe handling:

Wear suitable protective clothing. Avoid contact with skin and eyes. Keep away from excessive heat, open flames and from strong oxidizing agents. Do not eat, drink or smoke when using this product. Wash hands and exposed skin thoroughly after handling, and before eating, drinking, chewing gum, using tobacco or using the toilet.

Conditions for safe storage, including any incompatibilities:

Store in a cool place. Keep container tightly closed in a dry and well ventilated place. Damaged or leaking containers which cannot be used immediately should be transferred to suitable sound containers and properly marked. Keep away from food, drink and animal feed. Separate from chlorates, nitrates and other oxidizing materials.

8. Exposure controls / personal protection

Occupational exposure limits:

OSHA PEL-TWA: Not established
ACGIH (2015) TLV-TWA: Not established
Workplace exposure limits (WELs): Not established

Appropriate engineering controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations low. Ensure that eyewash stations and safety showers are in proximity to the work-station location.

Personal protective equipment:

Wear long-sleeved shirt and long pants and shoes plus socks. Wear waterproof gloves and safety goggles while handling the product.

9. Physical and chemical properties

Appearance:

Transparent liquid

Color:

Blue

Odor:

Odourless

Odor threshold:

Not relevant

pH (1% aqueous solution):

6.0-7.0

Melting point/Freezing point:

Not applicable (the product is an aqueous solution)

Boiling point:

> 100°C

Evaporation rate:	Not applicable
Flash point:	> 100°C
Flammability (solid, gas):	Not applicable
Upper/lower flammability or explosive limits:	Not applicable
Vapour pressure (25°C):	Not applicable
Vapour density:	Not available
Relative density:	Not available
Bulk density (20°C):	1.45-1.49 g/mL
Solubility in water (25°C):	Miscible in any proportion with water (the product is an aqueous solution)
Partition coefficient n-octanol/water (23°C):	Not applicable
Ignition temperature:	Not applicable
Decomposition temperature:	Not available
Viscosity (25°C):	5.81 cSt (@20°C), 3.36 cSt (@40°C)
Explosive properties:	The product is not explosive

10. Stability and reactivity

Reactivity:	Will react with strong oxidizers and strong reducers.
Chemical stability:	Stable at room temperature and under recommended storage and handling conditions.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Avoid exposure to incompatible materials. Avoid exposure excessive heat or open flame.
Incompatible materials:	Strong oxidizers like potassium permanganate and strong reducers like zinc powder.
Hazardous decomposition products:	None known.

11. Toxicological information

Acute toxicity	
Oral LD ₅₀ (rat):	>5000 mg/kg
Dermal LD ₅₀ (rabbit):	>4000 mg/kg
Inhalation LC ₅₀ (rat):	> 5.05 mg/L
Skin corrosion/irritation	
Skin irritation (rabbit):	Not irritant
Serious eye damage/irritation	
Eye irritation (rabbit):	Not irritant
Respiratory or skin sensitization	
Dermal sensitization (guinea pig):	Not a contact sensitizer
Germ cell mutagenicity:	No mutagenic potential
Carcinogenicity:	NTP: Not listed OSHA: Not listed IARC: Not listed

Reproductive toxicity:	No primary embryotoxic or teratogenic effects
STOT* single exposure:	Not available
STOT repeated exposure:	Not available
Aspiration hazard:	No aspiration hazard

*Specific Target Organ Toxicity

12. Ecological information

Ecotoxicity:

Birds:

Northern bobwhite LD ₅₀ :	> 2250 mg a.i./kg
Northern bobwhite dietary LC ₅₀ (5d):	> 5620 mg a.i./kg
Mallard ducks dietary LC ₅₀ (5d):	> 5620 mg a.i./kg

Fish:

Rainbow trout LC ₅₀ (96 hrs.):	> 118 mg a.i./L
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Crustacean:

<i>Daphnia magna</i> EC ₅₀ (48 hrs.):	> 118 mg a.i./L
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Honeybees:

LD ₅₀ , oral (48 hrs.):	> 145 µg/bee
LD ₅₀ , contact (48 hrs.):	>207µg/bee

Persistence and degradability:

Not readily biodegradable

Bioaccumulative potential:

No bioaccumulative potential

Mobility in soil:

Medium to low mobility in soil

Other adverse effects:

Not available

13. Disposal considerations

According to FIFRA: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

14. Transport information

Not regulated for transportation.

15. Regulatory information

This data sheet complies with the requirements of the Global Harmonized System of Classification and Labelling of chemicals (GHS) and the Occupational Safety and Health Standards HCS 2012, 29 C.F.R. § 1910.1200 (OSHA).

According to FIFRA: This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if swallowed or if absorbed through skin.
Causes moderate eye irritation.

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

16. Other information

The information contained herein is applicable solely to the indicated product, and does not relate to any other use of this product as described. Its use is intended by persons having technical skill and at their own discretion and risk. The information has been developed from sources reliable. This information is furnished without warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose is made with respect to the information contained herein.

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