

SAFETY DATA SHEET

Issue date: 18/09/2023

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 names: Benon, Benon 50 SL, Canon, Canon 50 SL, Stamina LS 50

Recommended use: Systemic Fungicide

Supplier: Luxembourg Industries Ltd.

27 Hamered St., Tel Aviv, 6812509

ISRAEL

Emergency phone number: +972 3 796 4300

2. Hazards identification

Classification of the substance or mixture

Classification of the product according to the Global Harmonized System of Classification and Labelling of Chemicals (GHS).

Hazard classification: Acute toxicity, Dermal Category 5

Label elements: <u>Pictogram:</u> No symbol <u>Signal word:</u> 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.

Other hazards: Not known.

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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:

CAS No.: 13977-65-6 + 13492-26-7

Content: 485-515 g/L (phosphorous acid equivalent)

4. First-aid measures

Call a physician immediately in all cases of suspected poisoning.

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.

Never give anything by mouth to an unconscious person.

Inhalation: Remove victim from exposure by moving to an area of fresh air.

If breathing is difficult or absent, send for immediate medical attention.

If breathing has stopped, artificial respiration should be started by qualified personnel.

Call a poison control center or doctor for further treatment advice.

Eves: 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. If

eye irritation persists, call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing and wash before reuse.

Rinse skin immediately with plenty of water for 15-20 minutes. If irritation or discomfort develops, seek medical attention.

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: TLV (ACGIH): 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 Colour: Colourless to blue

Odourless 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):

Vapour pressure (25°C):

Not applicable

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: Not applicableIgnition temperature: Not applicableDecomposition 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

No carcinogenic potential

Reproductive toxicity:No primary embryotoxic or teratogenic effects

STOT* single exposure:Not available **STOT repeated exposure:**Not available

Aspiration hazard: No aspiration hazard

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 LC₅₀ (96 hrs.): > 118 mg a.i./L

Crustacean:

Daphnia magna EC_{50} (48 hrs.): >118 mg a.i./L



^{*}Specific Target Organ Toxicity

Honeybees:

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

Persistence and degradability:

Bioaccumulative potential:

Mobility in soil:

Not readily biodegradable

No bioaccumulative potential

Medium to low mobility in soil

Other adverse effects: Not available

13. Disposal considerations

Dispose of in accordance with applicable national, federal, state and local laws and regulations.

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).

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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