




SAFETY DATA SHEET

Section 1: Product and Company Identification

Product Name: Phostrol Fungicide
Pest Control Number: 30449
Product Use: Fungicide
Supplier: Engage Agro Corporation
1030 Gordon St.
Guelph, ON
N1G 4X5
www.engagagro.com
(519) 826-7878

Section 2: Hazards Identification

WHMIS Classification	Transport Symbol	Personal Protective
 Not controlled	 Not regulated	

Emergency Overview: **Appearance, Colour and Odour:** Liquid emulsion, clear, odourless.
This product is not controlled under WHMIS.
While this product is not considered hazardous, this SDS contains valuable information critical to the safe handling and proper use of the product.

Potential Health Effects:

ACUTE (short term):

Relevant Route(s) of Exposure: Inhalation, Skin Contact, Eye Contact

- Inhalation:** The component substances are not classified as harmful or toxic by inhalation. Practically non-toxic based on toxicity studies.
- Ingestion:** The component substances are not classified as harmful or toxic if swallowed. Practically non-toxic based on toxicity studies.
- Skin:** The component substances are not classified as irritating, harmful or toxic in contact with skin. Prolonged skin contact may cause mild irritation.
- Eye:** Direct contact with the eyes may cause mild irritation. Practically non-toxic based on toxicity studies.

CHRONIC (long term): See Section 11 for additional toxicological data.

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Medical Conditions Aggravated by Exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

Interactions with Other Chemicals: See Section 10.

Potential Environmental Effects: Drift and runoff from treated area may be hazardous to fish and aquatic organisms. See section 12.

Section 3: Composition / Information on Ingredients

No hazardous ingredients by WHMIS criteria.

Section 4: First Aid Measures

Inhalation: Move the person to fresh air. If the person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Eye Contact: 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 centre or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice.

Ingestion: Call a poison control centre or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

Section 5: Fire Fighting Measures

Flammable Properties: Not applicable, product is not combustible.

Suitable extinguishing Media: Use extinguishing media appropriate for the surrounding fire. Dry chemical, water spray, chemical foam, carbon dioxide, water fog.

Unsuitable extinguishing Media: Not applicable

Explosion Data:

Mechanical Impact: Not applicable

Static Discharge: Not applicable

Specific Hazards arising from the Chemical: May produce gases such as phosphine and oxides of phosphorous.

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Protective Equipment and precautions for firefighters: Firefighters should wear full protective gear including a NIOSH/MSHA approved self-contained breathing apparatus.

Section 6: Accidental Release Measures

Personal Precautions: Wear adequate personal protective equipment. Ventilate area.

Environmental Precautions: Do not allow product to reach public sewer systems, natural waterways or ground water. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

Methods for Containment: Dike spill using absorbent or impervious materials. Collect and contain contaminated absorbent and dike material for disposal

Methods for Clean-up: Soak up the spilled liquid using a suitable inert absorbent. Collect product and contaminated absorbent and place in suitable, labeled containers for proper disposal. Clean the spill area with plenty of water.

Section 7: Handling and Storage

Handling: Avoid breathing vapour or spray mist. Do not swallow or allow to absorb through the skin. May irritate skin. Avoid contact with eyes, skin or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash separately from other laundry before reuse.

Storage: Store in a cool, dry, secure and well-ventilated area. To prevent contaminations store this product away from food or feed. Keep pesticide in original container. Not for use or storage in or around the home. Do not store near open flame.

Section 8: Exposure Controls/Personal Protection

Exposure Controls

Engineering Controls: General ventilation normally adequate.

Personal Protection:

Eye/Face Protection: Wear safety glasses or chemical splash goggles as needed to prevent eye contact. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: Wear long-sleeved shirt and long pants, chemical-resistant gloves, shoes plus socks and protective eyewear to prevent skin irritation.

Respiratory Protection: Not normally required. In workplaces where vapours or mists exceed the exposure limits, wear an appropriate respirator.

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A respiratory protection program that meets Canadian Standards Association (CSA) Standard Z94.4-2002 must be followed whenever workplace conditions warrant a respirator's use.

Other Protective Equipment:

In workplaces where this product is handled in bulk quantities, have a safety shower and eyewash fountain readily available in the work area.

General Hygiene Measures:

Avoid breathing vapour or spray mist. Do not swallow or allow to absorb through the skin. Avoid contact with eyes, skin or clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash separately from other laundry before reuse.

Section 9: Physical and Chemical Properties

Physical State: Liquid	Flash Point & method: Not applicable
Appearance, Colour and Odour: Clear, odourless	Autoignition Temperature: Not applicable
Odour Threshold: Not available	Flammability Limits in Air: Not applicable
pH: 6.5-7.5	Vapour Pressure: Not available
Relative Density: 1.43 g/cm ³ (water = 1)	Vapour Density: Not available (Air = 1)
Partition coefficient: Not applicable (n-octanol/water)	Evaporation Rate: Not applicable (n-Butyl Acetate = 1)
Solubility: Soluble in water	Boiling Point/Range: Similar to water
Viscosity: 21.8 cps@25 °C	Freezing Point: Similar to water

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal handling and storage conditions.
Conditions to Avoid: Avoid prolonged exposure to high temperatures.
Incompatible Materials: Incompatible with copper metal and alloys containing copper. May be corrosive to ferrous metals and alloys. Incompatible with strong oxidizing agents, strong reducers and water-reactive materials.

Use caution when mixing this product with other agricultural chemicals. Some chemicals may be incompatible.

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Hazardous Decomposition Products: Under fire conditions may produce gasses such as phosphine and oxides of phosphorous.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Section 11: Toxicological Information

Acute Toxicity Data

Component Substance LD₅₀ Oral (mg/kg): > 5000 mg/kg

LD₅₀ Dermal (mg/kg): > 5000 mg/kg

LC₅₀ Inhalation (4 hrs): 2.06 mg/L

Other Toxicity Data

Carcinogenicity: No known carcinogenicity risks are associated with phosphorous acid or inorganic phosphates.

Irritation: Not expected to cause eye irritation. Rabbit – slightly irritating to the skin.

Sensitization: Not skin sensitizing

Neurological Effects: Not applicable

Genetic Effects: *In vitro* and *in vivo* tests have not demonstrated mutagenic or genotoxic effects with inorganic phosphates.

Reproductive Effects: It is not expected that inorganic phosphates would cause reproductive effects.

Developmental Effects: It is not expected that inorganic phosphates would cause developmental effects.

Section 12: Ecological Information

Ecotoxicity: Studies demonstrate that phosphorous acid is not harmful to most non-target organisms, but can be somewhat toxic to fish and aquatic invertebrates.

Persistence/Degradability: Not applicable

Bioaccumulation/Accumulation: Not expected to bioaccumulate.

Mobility: Completely soluble in water.

Section 13: Disposal Considerations

Waste Disposal Method:

Recyclable container: Do not reuse this container for any purpose. This is a recyclable container and is to be disposed of at a container collection site. Contact you local distributor/dealer or municipality for the location of the nearest collection site. If there is no container site in your area, dispose of the container in accordance with provincial requirements

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Refillable Container: For disposal, this container may be returned to the point of purchase (distributor/dealer). It must be refilled by the distributor/dealer with the same product. Do not reuse this container for any other purpose.

Section 14: Transport Information:

Canadian Transportation of Dangerous Goods (TDG): Not regulated as a dangerous good.

Section 15: Regulatory Information

This product has been classified in accordance with the hazard criteria of the *Controlled Products Regulations* and the SDS contains all the information required by the *Controlled Products Regulations*.

WHMIS Classification: (for workplace exposures) Not controlled

Registration: Pesticide product registered and subject to the regulations under the Pest Control Products Act.

Section 16: Other Information

Prepared by: Engage Agro Corporation

Revision Date: June 13, 2012

Disclaimer:

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