



SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Vacres
Product Code: VAC
Manufacturer information:
Company Name: Microbial Biological Fertilizer International, LLC
Address: St. Joe Missouri 4006 South, 40th Street, St. Joseph, Missouri, 64503
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2. Composition / Information on Ingredients

Product description: A water-soluble powder contact fungicide and insecticide for controlling diseases and pests on agricultural crops as listed.
Dangerous ingredients: None.

3. Hazards Identification

Important hazards: None.

4. First Aid Measures

General Advice: Keep out of the reach of children and store in original containers only.
Inhalation: Remove patient to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician or poison control center immediately.
Skin Contact: Wash thoroughly with soap and water. See a doctor if an allergic reaction is noticed.
Eye Contact: Flush with water. Remove contact lenses, if present and easy to do. Continue rinsing. See a doctor if an allergic reaction is noticed.
Ingestion: Drink water. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. See a doctor if an allergic reaction is noticed.

5. Fire Fighting Measures

Suitable extinguishing media:

Dry chemical, CO₂, water spray or regular foam. Move containers from the fire area if you can do it without risk. Dike fire-control water for later disposal. Water spray, fog, or regular foam.

Unsuitable extinguishing media:

None.

Specific hazards arising from the chemical

Thermal decomposition can lead to the release of irritating and toxic gases and vapors.

Hazardous combustion products: Carbon oxides.

Explosion data

Sensitivity to Mechanical Impact: None.

Sensitivity to Static Discharge: None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers/tanks with water spray.

6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Personal precautions: Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Avoid creating dust.

For emergency responders: Use personal protection, as recommended in Section 8. Ventilate the area.

Environmental precautions

Environmental precautions: Prevent entry into waterways, sewers, basements, or confined areas.

Methods and material for containment and cleaning up

Methods for containment: Prevent dust clouds. Prevent further leakage or spillage if it is safe to do so.

Methods for cleaning up: Avoid creating dust. Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling: Use personal protective equipment as required. Avoid contact with skin, eyes, or clothing. Wash contaminated clothing before reuse. Do not eat, drink, or smoke when using this product.
Do not breathe dust/fumes/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep the container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from food, drink, and animal feed. Keep in properly labeled containers. Keep cool. Protect from sunlight.

Packaging materials: Do not reuse the container.

Incompatible materials: Strong oxidizing agents.

8. Exposure Controls / Personal Protection

Control parameters

The usual precautionary measures for handling chemicals should be observed. Provide adequate ventilation.

Appropriate engineering controls

Engineering controls ensure adequate ventilation, especially in confined areas. Showers, eyewash stations and ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Skin and body protection: Wear suitable protective clothing. Wear protective butyl rubber gloves. Protective shoes or boots.

Respiratory protection:	Ensure adequate ventilation, especially in confined areas.
General Hygiene Considerations:	When using do not eat, drink, or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes, or clothing. Wash hands thoroughly after handling. Wash contaminated clothing before reuse.

9. Physical and Chemical Properties

Physical state:	Powder
Color:	White
Odor:	Characteristic
pH:	8.0 - 8.4 (1% solution)
Moisture %:	<0.5%
Density:	1.0381 g/ml
Solubility (g/L, 25°C):	90 g/L
Solubility in organic solvents:	Not applicable
Partition coefficient:	Not applicable
Vapour pressure:	Not applicable
Boiling point:	Not applicable
Melting point:	Not applicable
Flash point:	Not combustible
Explosive properties:	Not combustible
Auto-ignition temp:	Not applicable

10. Stability and Reactivity

Reactivity	No data available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	High humidity.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological Information

LD₅₀:	Acute Oral LD ₅₀ (rat): 5000 mg/kg (Cat 5) Acute Dermal LD ₅₀ (rat): >2000 mg/kg (Cat 5)
LC₅₀:	Inhalation LC ₅₀ (rat): 5.388 mg/L (4h) (Cat 5)
Acute Eye Irritation (Rabbit):	Not classified as an eye irritant.
Acute Dermal Irritation (Rabbit):	Not classified as a skin irritant.
Skin Sensitization (Guinea Pig):	Not considered a skin sensitizer.
Local effects:	None.
Chronic toxicity:	Non-carcinogenic, non-teratogenic, non-mutagenic or reproductive, not harmful in laboratory animals.

12. Ecological Information

Honeybee (<i>Apis mellifera</i>)	
Acute Contact LD₅₀:	>25 µg a.i./bee
Fish toxicity:	No known toxicity.
Biodegradability:	The product's constituents are biodegradable.
Mobility:	Immobile.
Bioaccumulation:	None.

13. Disposal Considerations

Shake all the pesticide formulation out of the bag into the spray or mixing tank. Turn the bag inside out. Hold the bag over the spray or mixing tank and rinse the bag with running water for thirty seconds. Shake the rinsate off into the tank. Repeat the rinsing twice. Do not bury, burn, or donate the bag to any other parties that may use it as a container for foodstuffs. These bags cannot be recycled and must be incinerated by a licensed incineration facility.

14. Transport Information

UN number:	N/A
UN Proper shipping name:	N/A
Transport hazard class(es):	N/A
Packing Group:	N/A

15. Regulatory Information

EPA registered in the USA – Foliar application for the control of insects and fungal pathogens on crops as listed. Application instructions are listed on the label, State-dependent.

16. Other Information

The purpose of the above information is to describe the product only in terms of health and safety requirements. The information given should not, therefore, be construed as guaranteeing specific properties or as a specification. Customers should satisfy themselves as to the suitability and completeness of such information for their own particular use.

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