

# MATERIAL SAFETY DATA SHEET

## Section 1 – Product and Company Identification

Material Name: XiteBio<sup>®</sup> PulseRhizo<sup>™</sup> Liquid for Pea, Lentil, and Faba Bean  
Other Designation: Liquid inoculant product containing live cultures of nitrogen-fixing *Rhizobium* bacteria  
Chemical Formula: Mixture  
Company: XiteBio Technologies Inc.  
Address: 3194 St. Mary's Road, Winnipeg, Manitoba, R2N 4A8, Canada  
Phone: 204-257-0775

## Section 2 – Ingredient Information

Hazardous	CAS	OSHA	ACGIH	ACGIH
<u>Ingredient:</u>	<u>Number:</u>	<u>PEL:</u>	<u>TLV:</u>	<u>STEL:</u>
None				

Contains naturally-occurring, non-pathogenic *Rhizobium leguminosarum* bacteria.

## Section 3 – Hazards Identification

### EMERGENCY OVERVIEW

There are no known health effects caused by the *Rhizobium* bacteria contained in this product.

Primary Entry Routes: Oral (swallowing)

Acute Effects (Signs & Symptoms of Overexposure):

Potential Health Effects

- ▶ Eyes: Liquid splashed in eyes may cause minor mechanical irritation.
- ▶ Skin: No known hazard.
- ▶ Inhalation: No known hazard.
- ▶ Ingestion: No known hazard.

Chronic Effects: No known hazard.

Medical Conditions Aggravated by Exposure: No known hazard.

Target Organs: None

Carcinogenicity: Contains no known or suspected carcinogens.

HMIS: Health – 0, Flammability – 0, Reactivity - 0

## Section 4 – First Aid Measures

Eyes: Flush eyes with water for at least 15 minutes. Get medical attention if irritation persists.

Skin: Wash exposed skin with soap and water.

Inhalation: Remove person to fresh air. Get medical attention if irritation persists.

Ingestion: No treatment necessary.

## Section 5 – Fire Fighting Measures

Flash Point: None

Autoignition Temp.: Not determined

Explosive Limits: LEL: Not applicable

UEL: Not applicable

Extinguishing Media: Use agent most appropriate to extinguish surrounding fire.

Unusual Fire or Explosion Hazards: None known

Fire Fighting Instructions: No special requirements.

## Section 6 – Accidental Release Measures

Large Spill/Leak Procedures: Contain spill and recover for use or disposal.

Small Spills: Spilled liquid may cause slippery residue on hard surface. Flush spill area with water to wash away any slippery residue.

### Section 7 – Handling and Storage

Storage: Store in original container in a cool, dry place. Avoid repeated freeze/thaw cycles. Shake well before use. Open package only when ready to use. Use before product expiration date.

Handling: No special handling requirements. Follow normal hygiene and housekeeping standards for agricultural products.

### Section 8 – Exposure Controls, Personal Protection

Ventilation: Special ventilation is not required for the normal handling and use of this product when following the label instructions.

Protective Clothing/Equipment: No special requirements.

Respirator: None required when used according to label instructions.

Contaminated Equipment: Clean application equipment with detergent and water after use.

Comments: Practice general personal hygiene after using this product. After handling any chemical or biological product, wash arms, hands and face with soap and water before eating, drinking or smoking.

### Section 9 – Physical and Chemical Properties

Physical State: Liquid

Color: Yellow to brown

Odor: Mild

Melting Point: Not determined

Boiling Point: 216°F (102°C)

Freezing Point: 25°F (-4°C)

Water Solubility: Soluble

% Volatile (Volume): Not determined

Specific Gravity/Density: 1 g/cc

Vapor Pressure: Not determined

Vapor Density: Not determined

pH: 6 to 8

### Section 10 – Stability and Reactivity

Stability: Stable

Conditions to avoid: None

Hazardous Polymerization: Will not occur

Chemical Incompatibilities: Some seed-applied chemicals, including fungicides, may be harmful to the bacteria in this product. See product label for further information on the use of fungicides or other chemicals in conjunction with seed treatment.

Hazardous Products of Decomposition: Oxides of carbon.

### Section 11 – Toxicological Information

Eye Effects/Eye Irritation: Non-irritating

Acute Oral Effects: No data available

Acute Inhalation Effects: No data available

Acute Dermal Effects: No data available

Skin Irritation: Non-irritating

Skin Sensitization: Not a skin sensitizer

### **Section 12 – Ecological information**

The product contains non-pathogenic bacterial strains that occur naturally in soil, and is biodegradable.

### **Section 13 – Disposal Considerations**

This product is not regulated as a hazardous waste. Unused product may be disposed of in any approved landfill for domestic waste.

### **Section 14 – Transport Information**

Transportation Data: This product is not regulated as a hazardous material for all modes of transportation within Canada and U.S.

Hazard Classification: Not applicable

ID No.: Not applicable

### **Section 15 – Regulatory Information**

TSCA: All components of this product are listed on the TSCA inventory.

SARA Section 313: Contains no reportable components.

OSHA Hazard Classification: Non-hazardous

Proposition 65: Contains no components subject to warning requirements.

WHMIS/Controlled Product Regulations: This product has been classified in accordance with the hazard criteria of the CPR and this MSDS contains all of the information required by the CPR.

### **Section 16 – Additional Information**

Prepared by: XiteBio Technologies Inc.

Date: January 14, 2016

#### **Notice to reader**

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