

## HumiSoil®

HumiSoil® is a humus-rich soil enhancer encapsulating the key technologies pioneered by VRM Biologik® for soil enhancement. This product helps build humus in soil.

HumiSoil® helps to stimulate natural biological reactions responsible for organic matter conversion and the adsorption and digestion of some negative substances in soil. With continued use, this product assists in the maintenance of healthy soil biology. Regular use of HumiSoil® incubates in place the natural biological activity responsible for water manufacture in soil. HumiSoil® is best used in tandem with VRM Biologik®'s XLR8® Bio.

**Warnings:** Not for human consumption. If accidental ingestion occurs, call a poison control centre. Do not use this product in any way contrary to this label. Keep away from eyes and exposed skin. If skin or eye contact occur rinse thoroughly with clean water to avoid irritation. Follow all local laws when disposing of this product. Use in a well-ventilated area. This product has a strong fermentative odour which dissipates quickly after use.

**NOT TO BE USED FOR ANY PURPOSE OR IN ANY MANNER CONTRARY TO THE LABEL**

**Ingredients:** Humic substances and purified water.

## Directions for Use

### Application to Soil

Apply to soil surface at rates of between 2 to 4 tonnes per hectare (1 to 2 tonnes per acre) according to intended growing activity. For best results spray VRM Biologik® XLR8® Bio over HumiSoil® before lightly tilling in.

Crop Type	First Application (Tonnes/ Ha)	Subsequent Application (Tonnes/ Ha)	Special instructions
Before ground preparation	4	-	Sprinkle to ground surface prior to forming growing mound. Applicable for broadacre crops, and horticulture/ vegetables.
At ground preparation	4	-	Sprinkle to ground surface prior to planting.
After ground preparation	4	-	Sprinkle to ground surface of prepared growing mound.
Field crops (ie, corn, sugar cane, cassava, etc)	-	2	Sprinkle under tree canopy (preferably in a circle at or near the extension of leaf canopy rather than directly around the trunk). Apply 3 times during the growing season, with fertiliser application.

Aquaculture	4	-	Sprinkle to floor of pond prior to fertilising and 10 days prior to filling pond.
Rice	4	-	Sprinkle to floor of pond prior to fertilising and 10 days prior to filling pond.
Land Recovery	20 – 50		Dosage dependent on soil type and conditions. Spread material across surface before lightly tilling and rolling flat. Consult with VRM Biologik® Technical Staff for specific directions.



## SAFETY DATA SHEET

### HumiSoil®

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identifier	: 10914HS
WHMIS Classification	: N/A
Product Use	: Humate additive
Manufacturer's Name	: <b>VRM Biologik Pty Ltd</b>
Street Address	: 22 Reward Crescent, Bohle, Queensland 4818 Australia
Phone	: +61 7 4774 6337
Date Prepared	: 16 September 2019

#### 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	%	CAS Number	LD50 of Ingredient	LC50 of Ingredient
Humic substances	57	1415-93-6	N/A	N/A
Purified water	43	7732-18-5	N/A	N/A

#### 3. HAZARDS IDENTIFICATION

Poisons Schedule (Australia)	: N/A
Hazard Categories	: N/A
Pictograms	: N/A
Signal Word	: N/A
Hazard Statements	: N/A

#### 4. FIRST AID MEASURES

Contact Point	Detrimental Results	First Aid Measures
Eye Contact:	May result in mild irritation. Avoid contact with water - based contact lenses.	Rinse with water for at least 15 minutes.
Skin Contact:	None at prepared dilutions.	N/A
Ingestion:	May cause nausea if swallowed.	Give water to drink, do not induce vomiting.
Inhalation:	None at prepared dilutions. Note: intentional concentration and inhalation of vapours may be harmful.	Remove victim to open and ventilated area.



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## 5. FIRE FIGHTING MEASURES

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Flammable Limits	: Burns as per activated carbon
Means of Extinction	: Water
Flash Point (Degrees C)	: N/A
Upper Flammable Limit (% by volume)	: N/A
Lower Flammable Limit (% by volume)	: N/A
Auto Ignition Temperature (Degrees C)	: N/A
Explosion Data - Sensitivity to Impact	: N/A
Explosion Data - Sensitivity to Static Discharge	: N/A
Hazardous Combustion Products	: N/A

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## 6. ACCIDENTAL RELEASE MEASURES

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Emergency Procedures	: Nil
Clean Up Procedures	: Sweep up spilled material.
Waste Disposal Information	: Dispose as for composted mulch.

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## 7. HANDLING AND STORAGE

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Handling	: None
Precautions For Safe Handling	: None
Storage	: Store away from excessive heat

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

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Exposure Limits	: N/A
Respiratory Protection	: Product should be treated as any organic particulate carbon. Respiratory protection should be used.
Ventilation	: Product should be treated as any organic particulate carbon. Respiratory protection should be used.
Protective Gloves	: Rubber / Plastic Gloves recommended.
Eye Protection	: Particulate matter may cause irritation.
Other Protective Measures	: None at prepared dilutions.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical State	: Solid
Odour and Appearance	: Dark Brown to Black Earth Colour / Soil Fragrance
Odour Threshold	: N/A
Specific Gravity (H <sub>2</sub> O=1)	: As Soil
Vapour Density (Air=1)	: N/A Not a liquid
Vapour Pressure (mmHg)	: N/A Not a liquid
Evaporation Rate: (Butyl Acetate=1) /	: N/A Not a liquid
Boiling Point (degrees C)	: N/A Not a liquid
Freezing Point (degrees C)	: N/A Not a liquid
pH	: 4.5 - 6.5
Coefficient of Water/Oil Distribution	: N/A
Solubility In Water	: Solid
Percent Volatile By Volume	: Nil



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## 10. STABILITY AND REACTIVITY DATA

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Stability	: None
Conditions To Avoid	: Excessive direct heat may damage product.
Materials To Avoid	: None
Hazardous Decomposition Products	: None
Hazardous Polymerisation	: None

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## 11. TOXICOLOGICAL INFORMATION

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Effects of Acute Exposure	: N/A
Effects of Chronic Exposure	: N/A

### Irritancy of Product

Skin Sensitisation	: N/A
Respiratory Sensitisation	: N/A
Carcinogenicity-IARC	: N/A
Carcinogenicity-ACGIH	: N/A
Reproductive Toxicity	: N/A
Teratogenicity	: N/A
Embryotoxicity	: N/A
Mutagenicity	: N/A

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## 12. ECOLOGICAL INFORMATION

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Ecotoxicity	: Nil
Persistence and Degradability	: Nil
Mobility	: Nil
Other Adverse Effects	: Nil
Bioaccumulation potential	: Nil
Environmental Fate	: Nil
Environmental Impact	: Nil

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## 13. DISPOSAL CONSIDERATIONS

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General Information	: Dispose as for composted mulch.
Special Precautions for Landfill	: Recycle container where possible.



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#### 14. TRANSPORT INFORMATION

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##### LAND TRANSPORT

Proper Shipping Name	: HumiSoil®
Class	: Non-hazardous
Subsidiary Risk(s)	: Nil
EPG	: N/A
UN Number	: N/A
Hazchem	: N/A
Pack Group	: N/A
Special Precautions for user	: Nil

##### SEA TRANSPORT

Proper Shipping Name	: HumiSoil®
Class	: Non-hazardous
Subsidiary Risk(s)	: Nil
UN Number	: N/A
Hazchem	: N/A
Pack Group	: N/A

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#### 15. REGULATORY INFORMATION

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Poisons Schedule	: No Poisons Schedule number allocated
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#### 16. OTHER INFORMATION

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For information on appropriate emergency procedures, seek medical advice. For emergencies, please contact +61 403 466 820 (24 hours)

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#### VRM BIOLOGIK PTY LTD (ABN 14 137 264 496) - DISCLAIMER STATEMENT

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