



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substances or Mixtures

Hazardous Materials:

Chemical Name	Identifiers	% (weight)	LD ₅₀ /LC ₅₀	Classifications According to Regulation	Comments
Humic Acid	(CAS NO.) 1415-93-6	1-3	No Data Available	Acute oral toxicity – Category 4 Eye irritation – Category 2 STOT (Single Exposure) – Category 2	(EC NO.) 215-809-6

All components appear on the TSCA inventory. Components not listed are either non-hazardous or in concentrations of less than 1%.

SECTION 4: FIRST AID MEASURES

Description of First-Aid Measures

Inhalation: Remove to fresh air. Seek medical attention if symptoms occur.

Skin Contact: Wash affected area with plenty of soap and water for at least 15 minutes. Remove contaminated clothing/footwear. Get medical attention if irritation persists. Wash clothing before reuse.

Eye Contact: Rinse eyes with plenty of water, making sure to get under the upper and lower eyelids. If applicable, remove contact lenses after 5 minutes and continue to flush eye after removal. Get medical attention immediately if irritation persists.

Ingestion: DO NOT induce vomiting. Dilute with plenty of water or milk. Never give anything by mouth to a convulsing or unconscious patient. Get medical attention immediately.

Symptoms and Effects, both Acute and Delayed: Refer to “Section 11: Toxicological Information”.

Immediate Medical Attention/Special Treatments: If medical advice is needed, have product container or label at hand. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5: FIRE-FIGHTING MEASURES

Flammable Properties: Non-Flammable

Suitable Extinguishing Media: Water spray, carbon dioxide, or dry chemical

Unsuitable Extinguishing Media: None.

Special Hazards arising from the Substance or Mixture: None known.

Precautions for Fire-Fighters: Exercise caution when fighting any chemical fire. Firefighters’ protective clothing will only provide limited protection. Wear chemical protective clothing, including respiratory protection. Move containers from the area on fire if it can be done without risk.



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

- General Measures:** Equip clean-up crew with proper protection. Ensure the area is well ventilated and use appropriate respiratory protection if it isn't. Evacuate unnecessary personnel.
- Protective Equipment:** Always use appropriate personal protective equipment (PPE). Do not touch and avoid walking through spilled material. Do not touch damaged containers unless equipped with PPE.
- Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak if it can be done safely. Eliminate all ignitions sources (Smoking, flares, sparks, or flames). Ventilate closed areas before entering. If outdoors, stay upwind.
- Environmental Precautions:** Avoid run off and prevent entry to waterways, sewers, and public waters. Dispose of waste in accordance with local, regional, national, and/or international regulations.
- Containment & Clean-up Measures:** Clean up spill immediately and dispose of waste safely. Stop leak and isolate spill if it can be done safely. For more information on safe disposal, please refer to "Section 13: Disposal Considerations".

SECTION 7: HANDLING AND STORAGE

- Precautions for Safe Handling:** Before use carefully read the product label. Always handle empty containers with care as they may retain residual product. Ensure ventilation is adequate when using this product. Handle in accordance with good industrial hygiene and safety procedures. Wash hands or other exposed areas thoroughly with soap and water before eating, drinking, or smoking and again when leaving work.
- Conditions for Safe Storage:** Ensure containers are properly labelled and protected from physical damage when not in use. Check regularly for leaks or spills. Keep container closed when not in use. Store in a cool, dry, well-ventilated area away from combustible substances and away from heated areas, sparks and flame.
- Storage Incompatibilities:** Store in a location away from children, food items, potable water and in an area out of direct sunlight.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters:

Exposure Limits/Guidelines					
Substance	Results	Canada (Ontario)	ACGIH	NIOSH	OSHA
Bacterius PRO-WW	STEL	NDA	NDA	NDA	NDA
	TWA (PEL)	NDA	NDA	NDA	NDA



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

Exposure Controls

Engineering Measures/Controls: Use adequate ventilation to control the concentration of airborne contaminants and ensure it stays below the applicable exposure limit values. Gas detectors should be used when gases or vapors are released. Ensure all local/national regulations are met.

Individual Protection Measures: Use proper protective equipment. Wear safety goggles and protective gloves when handling this product. Avoid dermal exposure. In case of insufficient ventilation, or if exposure limits are exceeded or symptoms are experienced, use a NIOSH/MSHA approved respirator. Always handle product in accordance with good industrial hygiene and safety practice.

Key to Abbreviations:

NIOSH: National Institute of Occupational Safety and Health

MSHA: Mine Safety and Health Administration

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Material Description			
Appearance	Tan, grain-like substance	Flammability	Non-flammable
Odor	Earthy	Explosive Limits	Not applicable
Odor Threshold	No data available	Vapor Pressure	No data available
pH	6.8-8.5	Vapor Density	No data available
Melting Point	No data available	Relative Density	0.5 – 0.61 g/cm ³
Freezing Point	No data available	Solubility	Minimal
Initial Boiling Point	No data available	Partition Coefficient	No data available
Boiling range	No data available	Auto-Ignition Temperature	Not applicable
Flash Point	No data available	Decomposition Temperature	Not applicable
Evaporation Rate	No data available	Viscosity	No data available

SECTION 10: STABILITY AND REACTIVITY

Reactivity Data

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: None known. Hazardous polymerization will not occur.

Hazardous Decomposition Products: None known.

Conditions to avoid: Avoid storing in direct sunlight.

Incompatible Materials: Strong acid or alkali compounds may inactivate biological cultures.



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Chemical Name	Oral LD ₅₀	Dermal LD ₅₀	Inhalation LC ₅₀
Bacterius PRO-WW	>5000mg/kg	NDA	NDA

Health Hazards

GHS Properties	Classification
Aspiration Hazard	Not classified
Skin Corrosion/Irritation	Not classified
Serious Eye Damage/Irritation	Not classified
Respiratory Sensitization	Not classified
Skin Sensitization	Not classified
Carcinogenicity (IARC)	Not classified
Germ Cell Mutagenicity	Not classified
Reproductive Toxicity	Not classified
STOT – Single Exposure	Not classified
STOT – Repeated Exposure	Not classified

*STOT: Specific Target Organ Toxicity

Target Organ: Not applicable.
Routes of Entry: Not applicable.

Symptoms	Acute	Chronic
After Inhalation	May cause irritation to the respiratory system	No data available
After Eye Contact	May cause eye irritation	No data available
After Ingestion	May cause gastrointestinal tract irritation	No data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Minimal impact under normal conditions of use and storage.

Persistence and Degradability:

Soil: Contents are biodegradable.
Water: Disperses in water.

Bioaccumulative Potential: Not likely.
Mobility in the Soil: No data available.
Other adverse Effects: None known.



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

SECTION 13: DISPOSAL INFORMATION

Waste Treatment Methods

Product Waste: To be disposed of as hazardous waste. Dispose of waste in accordance with local, regional, national, and/or international regulations.

Packaging Waste: Dispose of container or packaging in accordance with local, regional, national, and/or international regulations.

SECTION 14: TRANSPORTATION INFORMATION

UN Number: Not UN regulated.

UN Proper Shipping Name: Not UN regulated.

Transport Hazard Class

Required Labels: None.

Transport Category: Not TDG regulated.

Packing Group: Not TDG regulated.

Environmental Hazards: Please refer to "Section 12: Ecological Information".

Transport in Bulk (according to Annex II of MARPOL 73/78 and the IBC code): No data available.

Special Precautions for User: Please refer to "Section 7: Handling and Storage".

SECTION 15: REGULATORY INFORMATION

Safety, Health, and Environmental Regulations:

International Inventories:

Chemical	AICS	TSCA	DSL	NDSL	EINECS/ELIN	ENCS	IECS	KECL	PICCS
Bacterius PRO-WW	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA

Inventory Legend:

AICS: Australian Inventory of Chemical Substances

TSCA: United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL: Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS: European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS: Japan Existing and New Chemical Substances

IECSC: China Inventory of Existing Chemical Substances

KECL: Korean Existing and Evaluated Chemical Substances

PICCS: Philippines Inventory of Chemicals and Chemical Substances



SAFETY DATA SHEET

In accordance with the Hazardous Products Regulations (HPR)

SECTION 16: OTHER INFORMATION

The product formulation contains a range of naturally occurring plant extracts which are known to be non-pathogenic to man or animals.

Further details may be available upon request from your local BACTERIUS distribution site.

Abbreviation Key/Legend:

NA:	Not Applicable
NDA:	No Data Available
CAS:	Chemical Abstract Service
IARC:	International Agency for Research on Cancer
ACGIH:	American Conference or Governmental Industrial Hygienists
NIOSH:	National Institute of Occupational Safety and Health
OSHA:	Occupational Safety and Health Administration
MSHA:	Mine Safety and Health Administration
EC No.:	Reference number used by the European communities to identify dangerous substances
LD50:	Chemical dose which kills 50% of the test population
LC50:	Concentration of a chemical which kills 50% of the test population
TWA:	Time weighted average
STEL:	Short Term Exposure Limit

The information contained in this form is based on data from sources considered technically reliable and has been provided in good faith in accordance with the available material. It is provided as a service to the persons using the product but conditions of use and handling may involve other and additional consideration beyond our control. No warranty, expressed or implied, is made and we will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information in this form.

Date of issue: 2016-07-25
Date of revision: 2016-07-27