

1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL

Product Name: **BioMAX Soluble Humate Prill**

LawrieCo Pty Ltd

A.B.N. 72 134 390 855
2A Capelli Road, Wingfield,
SOUTH AUSTRALIA, 5013
Tel: +61 8 8260 1134
Fax: +61 8 8260 2263

Web: www.lawrieco.com.au
Email: info@lawrieco.com.au



Emergency Contact

Poisons Information Centre:
13 11 26

LawrieCo Technical Manager:
0408 268 058

CAS Number	Mixture	Product Number	8016
------------	---------	----------------	------

Product Usage: As a fertiliser additive for increased fertiliser efficiency, plant growth stimulation and soil conditioning.

2. HAZARD IDENTIFICATION

Classified as a **Hazardous Substance** in accordance with Safe Work Australia - Hazardous Substances Information System (HSIS) Australia and Global Harmonised System (GHS) documents.

Not classified as Dangerous Goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

GHS Classification

Signal Word - **WARNING**

Hazard Class	Hazard Category
Skin Irritation	2
Eye Irritation	2
Specific target organ toxicity - single exposure	3

Pictogram



Exclamation Mark

Hazard Statements

H315	H319	H335
Causes skin irritation.	Causes serious eye irritation.	May cause respiratory irritation.

Precautionary Statements

General

P102+P103 Keep out of reach of children. Read label before use.

Prevention

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/ eye protection/ face protection.

Response

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTRE (telephone 13 11 26) or doctor/ physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P332 + P313	If skin irritation occurs: get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Disposal

P501	Dispose of contents/ container to an approved waste disposal plant.
------	---

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product name	BioMAX Soluble Humate Prill	SDS Code	8016
Product use	As a fertiliser additive for increased fertiliser efficiency, plant growth stimulation and soil conditioning.		
Ingredients	Name	CAS Number	Proportion w/w
	Water	7732-18-5	max. 10.0%
	Humic Acid	68514-28-3	55.0 – 60.0%
	Fulvic Acid	unknown	8.0 – <10.0%
	Binding Agents - Non Hazardous	proprietary	1.0 – <10.0%

4. FIRST AID MEASURES

Description of necessary first aid measures

Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a doctor.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth out with water. Consult a doctor.
Eyes	Rinse thoroughly with plenty of water for at least 15 minutes and consult a doctor.
Skin and hair	If skin or hair contact occurs, remove all contaminated clothing, wash skin and hair with soap and plenty of water.
First aid facilities	Clean water supply, soap or skin cleaner.
Advice to doctor	If poisoning occurs, consult with the Poisons Information Centre (Telephone 13 11 26). Have a copy of this safety data sheet or label available. Treat symptomatically.



Symptoms caused by exposure

Irritation of the skin, mucous membranes and eyes.

Medical attention and special treatment

Wash exposed skin and hair with water and soap. If swallowed give plenty of water. If in eyes flush continuously with running water for at least 15 minutes.

5. FIRE FIGHTING MEASURES

<i>Suitable extinguishing equipment</i>	Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.
<i>Specific hazards arising from the chemical fire</i>	Nature of decomposition products not known.
<i>Special protective equipment and precautions for fire fighters</i>	Wear self contained breathing apparatus for fire fighting if necessary. No HAZCHEM Code assigned.
<i>Further information</i>	No data available



6. ACCIDENTAL RELEASE MEASURES

<i>Personal precautions, protective equipment and emergency procedures</i>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
<i>Environmental precautions</i>	Prevent from entering waterways, sewage and drains. For any queries consult Local Statuary Authorities.
<i>Methods and materials for containment and cleaning up</i>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.



7. HANDLING and STORAGE

<i>Precautions for Safe Handling</i>	Avoid contact with skin and eyes. For personal protection see section 8. Avoid formation of dust and aerosols. Provide appropriate ventilation at places where dust is formed. Normal measures for preventative fire protection. After use and before eating, drinking or smoking, wash all exposed skin and hair with soap and water. Keep out of reach of children.
<i>Conditions of Safe Storage and Incompatibilities</i>	Containers must be clearly labelled. Store at room temperature. Keep container tightly closed in a dry well-ventilated place out of direct sunlight. Keep away from strong oxidising agents.
<i>Specific end uses</i>	Apart from uses mentioned in section 1. no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards OEL	There are no assigned exposure standards for this product.
Exposure standards STEL	There are no assigned exposure standards for this product.
Biological limited values	There are no known Biological Limited Values that have been assigned.
Engineering controls	Avoid creating dust. Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of the work day.
<u>Personal Protection</u>	
Inhalation AS –NZS 1716	For nuisance exposures use a class P1 or P2 particle respirator. For higher level of protection use a class P3. Use respirators and components tested and approved under appropriate government standards.
Eye AS –NZS 1337	Face shield or safety glasses fitted with side shields must be worn at all times during the handling and application period. Do NOT wear contact lenses. Use equipment tested and approved under appropriate government standards.
Gloves AS –NZS 2161	Handle with gloves. Gloves must be inspected prior to use. It is advisable to wear viton or PVC elbow length gloves at all times during the handling and application period. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Wash and dry hands.
Footwear AS –NZS 2210	It is advisable to wear enclosed footwear during the handling and application period.
Clothing AS –NZS 2919	It is advisable to wear protective clothing during the handling and application period.
Hearing AS –NZS 1270	Hearing protection not required.
Other Requirements	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Avoid unnecessary contact with eyes, skin and hair. After application, wash skin and hair thoroughly with soap and water.



9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, colour, etc)	Dark brown - black 3-4mm solid prills
Odour	Slight earthy odour
Odour threshold	No data available
pH (10g/L @ 20°C)	9.0 - 10.0
Melting point	No data available
Freezing point	No data available
Boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available

<i>Vapour density</i>	No data available
<i>Relative density @ 15.6°C</i>	0.85
<i>Solubility</i>	75% soluble in water
<i>Partition coefficient: n-octonal/water</i>	No data available
<i>Auto-ignition temperature</i>	No data available
<i>Decomposition temperature</i>	>100 °C
<i>Viscosity</i>	No data available
<i>Specific heat value</i>	No data available
<i>Saturated vapour concentration</i>	No data available
<i>Release of invisible flammable vapours and gases</i>	No data available
<i>Particle size (average and range)</i>	3-4mm
<i>Size Distribution</i>	No data available
<i>Shape and aspect ratio</i>	No data available
<i>Crystallinity</i>	No data available
<i>Dustiness</i>	Some dust present
<i>Surface area</i>	No data available
<i>Degree of aggregation or agglomeration, and dispersibility</i>	No data available
<i>Redox Potential</i>	No data available
<i>Biodurability or biopersistence</i>	No data available
<i>Surface coating or chemistry</i>	No data available
<i>Volatile organic compounds % volatile</i>	No data available

10. STABILITY AND REACTIVITY

<i>Reactivity</i>	No data available
<i>Chemical stability</i>	Stable under recommended storage conditions.
<i>Possibility of hazardous reactions</i>	Will not polymerise. Combustion in contact with strong oxidisers.
<i>Conditions to avoid</i>	No data available
<i>Incompatible materials</i>	Strong oxidising agents.
<i>Hazardous decomposition products</i>	No data available In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION

<i>Ingredient</i>	Humic Acid (68514-28-3)
<i>Acute toxicity</i>	LD ₅₀ - intraperitoneal rat 502mg/kg LD ₅₀ - intraperitoneal mouse 1,176mg/kg
<i>Acute oral toxicity</i>	LD ₅₀ - oral rat 10,480mg/kg
<i>Acute dermal toxicity</i>	No data available
<i>Acute inhalation toxicity</i>	No data available
<i>Specific Target Organ Toxicity STOT - single exposure</i>	Inhalation - May cause respiratory irritation. Hazard category 3

Specific Target Organ No data available
Toxicity STOT - repeated exposure

Other Health Effects

Inhalation Irritant to mucous membranes.

Ingestion Irritant to mucous membranes.

Eyes Causes eye irritation.

Skin Causes skin irritation.

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identified as a probable, possible or confirmed human carcinogen by IARC.

Mutagenicity Not mutagenic in animal studies.

Reproductive Toxicity No data available

Aspiration hazard No data available

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ectotoxicity No data available

Persistence and degradability No data available

Bioaccumulative potential No data available

Mobility in soil No data available

Other adverse effects No data available

13. DISPOSAL CONSIDERATIONS

Spills

Wash down area with water. Prevent spills from entering drains, surface water and ground water. Disposal must be carried out in accordance with Local Statuary Authorities.

Material

Handle and dispose of in compliance with current environmental waste legislation. If in doubt contact Local Statuary Authorities.

Contaminated Material

Empty containers may be suitable for reuse or recycling after cleaning and appropriate disposal of the cleaning agents. Disposal method dependent upon degree and nature of contaminated material. Disposal must be carried out in compliance with current environmental waste legislation. If in doubt seek professional advice or contact Local Statuary Authorities.

14. TRANSPORT INFORMATION

UN number Not required under ADG Code

Proper Shipping Name NOT CONSIDERED DANGEROUS GOODS

Transport Hazard Class

Not required under *Subsidiary Risk* Not required under ADG Code

Packing Group Not required under ADG Code.



<i>Environmental hazards for transport purposes</i>	Not a known marine pollutant according to IMDG Code. Not an Annexe I chemical according to MARPOL.
<i>Special precautions for user</i>	No data available
<i>Additional Information</i>	No additional information required by overseas regulatory agencies or regulations for the transport of goods by other modes.
<i>HAZCHEM</i>	Not required according to ADG Code.
<i>IMDG</i>	Not required according to IMDG Code.

15. REGULATORY INFORMATION

<i>Hazard Category</i>	The product is classified as a Hazardous Substance in accordance with Safe Work Australia in accordance with Hazardous Substances Information System (HSIS) Australia and Global Harmonised System (GHS)	
<i>Montreal Protocol</i>	Not an ozone depleting substance.	
<i>The Stockholm Convention</i>	Not a persistent organic pollutant.	
<i>The Rotterdam Convention</i>	Not a banned pesticide or industrial chemical.	
<i>Basal Convention</i>	Not a hazardous waste.	
<i>MARPOL</i>	Subject to Annexe III - Harmful Substances carried in Packaged Form.	
<i>Safety, health and environmental regulations</i>	<i>SUSMP Classification</i>	Not Classified as a Schedule Poison.

16. OTHER INFORMATION

This Safety Data Sheet conforms with the "PREPARATION OF SAFETY DATA SHEETS FOR HAZARDOUS CHEMICALS Code of Practice, DECEMBER 2011" by Safe Work Australia. To meet the GHS requirements under the WHS regulations in relation to the preparation of safety data sheets for hazardous chemicals.

SDS prepared January, 2014 version number 1.

Legend of Abbreviations and Acronyms

HSIS - Hazardous Substances Information System
GHS - Globally Harmonised System
ADG - Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road or Rail
IERG - Initial Emergency Response Guide
SDS - Safety Data Sheet
CAS Number - Chemical Abstract Service Number
w/w - Weight per weight
AS/NZS - Australian Standards and New Zealand Standards
OEL - Occupational Exposure Limit
STEL - Short Term Exposure Limit
pH - Potential of hydrogen
°C - Degrees celcius
STOT - Specific Target Organ Toxicity
BCF - Bioconcentration Factor
MARPOL - International Convention for the Prevention of Pollution from Ships
IMDG - International Maritime Dangerous Goods
UN Number - United Nations Number
SUSMP - Standards for the Uniform Scheduling of Medicines and Poisons
LD50 - Median lethal dose required to kill half the members of a tested population after a specified test duration

Legend of Abbreviations and Acronyms (cont.)

mg/kg - Milligrams per kilogram

IARC- International Agency for Research on Cancer

Emergency Contact

Poisons Information Centre:
13 11 26

LawrieCo Technical Manager:
0408 268 058

Disclaimer

The data provided is to best of LAWRIECO's knowledge and is believed to be accurate and reliable as of the date of issue. However no expressed or implied warranties are given. LAWRIECO cannot anticipate or control the conditions under which this information may be used. Therefore, it is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their particular use. It is the responsibility of the user to ensure that the issue is current. This information given is a non-controlled document.

End of Safety Data Sheet