

1. PRODUCT IDENTIFIER & IDENTITY FOR THE CHEMICAL



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13 11 26 (Australia)
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CAS Number:	Mixture	Product Code:	BIOLMLF4
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Other Names: None.

Product Use: Recommended for use in fermentation of microbes as a fertiliser additive only. A sterile liquid formula of growth nutrients for beneficial bacteria and fungi.

2. HAZARD IDENTIFICATION

Classified as a Non-Hazardous Substance

in accordance with Safe Work Australia - Hazardous Chemicals Information System (HCIS) Australia, Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Not Classified as a Scheduled Poison

in accordance with the Standard for the Uniform Scheduling of Medicines and Poison (SUSMP) Australia.

Not Classified as Dangerous Goods

in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

GHS	Non-Hazardous
SUSMP	Not a Scheduled Poison
ADG	Not Dangerous Goods

GHS Classification

Hazard Categories	Not applicable
Signal Word	Not applicable
Hazard Statements	Not applicable

Precautionary Statements – General, Prevention, Storage and Disposal

General

If medical advice is needed, have the product container or label on hand. Keep out of reach of children. Read label before use.

Prevention

Wash hands and exposed skin thoroughly after handling.

Storage

Store in a cool location.

Disposal

Dispose of container to an approved waste disposal plant.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Product name	BioMAX MicroLife Food	SDS Code	8043
Product use	Recommended for use in fermentation of microbes as a fertiliser additive only		
Ingredients	Name	CAS Registry Number®	Proportion w/w
	Water	7732-18-5	50.0 – 60.0%
	Yeast extract	8013-01-2	5.0 – 10.0%
	Potato starch	9005-25-8	5.0 – 10.0%
	Peptone	-	5.0 – 10.0%
	Molasses	68476-78-8	5.0 – 10.0%
	Malt extract	0130498-22-5	<5.0%
	Inorganic salts	Mixture	<5%
Thiamine HCl	67-03-8	<0.5%	

4. FIRST AID MEASURES

- Inhalation** Not a route of exposure, contains no volatile compounds.
- Ingestion** If swallowed rinse mouth with water, give plenty of water to drink. Contact a doctor if any symptoms arise.
- Eyes** If in eyes, immediately hold eyelids apart and rinse for several minutes with running water. Remove contact lenses if present and easy to do so. If any irritation occurs get medical attention.
- Skin and hair** If skin or hair contact occurs, wash skin and hair with plenty of soap and running water. If skin irritation occurs get medical attention.
- First aid facilities** Eye wash, clean water supply, soap, or skin cleaner.
- Advice to doctor** Have a copy of this safety data sheet or label available. Treat symptomatically.

Symptoms caused by exposure

Ingestion may cause nausea or vomiting.

Medical attention and special treatment

Wash exposed skin and hair with water and soap. If swallowed rinse mouth, give plenty of water to drink. If in eyes flush continuously with running water for at least 15 minutes. Treat symptomatically.



5. FIRE FIGHTING MEASURES

General measures

Clear fire area of all non-emergency personnel. Stay upwind. Keep out of low areas.

Flammability conditions

Product is a non-flammable liquid; dried product is of organic nature and combustible. Product is packaged in high-density polyethylene.

Suitable extinguishing equipment AS 2444:2001

Appropriate extinguishing media includes water, water spray, foam, dry chemical, or carbon dioxide. Use extinguishing media suitable for the surrounding fire and environment.

Specific hazards arising from the chemical fire

Low levels of carbon dioxide (CO₂) and carbon monoxide (CO). Toxic combustion and decomposition products will be those associated with combustion of the high-density polyethylene packaging.

Special protective equipment and precautions for fire fighters

Wear self-contained breathing apparatus for firefighting if necessary (includes firefighting helmet, coat, trousers, boots, and gloves).

No HAZCHEM Code assigned.



Further information

Flash Point	No data available
Lower Explosion Limit	No data available
Upper Explosion Limit	No data available
Auto Ignition Temperature	No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Use personal protective equipment. Avoid release to waterways. Product may make hard surfaces slippery. For personal protection see section 8.

Environmental precautions

Prevent spills from entering storm water drains and waterways.

Methods and materials for containment and cleaning up

Collect all residues with absorbent material, dry earth, or sand. For safe disposal product can be diluted in water and applied to soil or plants. For large spills cover storm water drains with a drain protector.



7. HANDLING and STORAGE

Precautions for safe handling

This product is non-toxic and not an irritant but as a precaution avoid contact with skin and eyes. Wear gloves and eye protection when handling. Wash hands and exposed skin immediately after use. Handle in accordance with good industrial hygiene and safety practices. For personal protection see section 8.

Conditions of safe storage and incompatibilities

Keep out of reach of children. Containers must be clearly labelled. Store tightly closed in a well-ventilated cool place out of direct sunlight.

Specific end use

Apart from uses mentioned in section 1, no other specific uses are stipulated.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure standards TWA (8 hour)	There are no assigned exposure standards for this product. For dried product: TWA = No data available for this mixture, however the HCIS specifies 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).
Exposure standards STEL (15 min)	There are no assigned exposure standards for this product. For dried product: STEL = No data available for this mixture, however the HCIS specifies 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).

Biological limited values

There are no known biological limited values that have been assigned.

Engineering controls

Keep away from storm water drains. Ensure adequate general or local exhaust ventilation. Handle in with good industrial hygiene and safety practices. Wash hands and exposed skin before breaks and at the end of the workday.

Personal Protection

Inhalation/respiratory AS –Nzs 1715/1716 Not required under normal operating conditions.

Eye and face AS –Nzs 1336/1337 Safety glasses fitted with side shields are recommended to prevent eye irritation.

Gloves AS –Nzs 2161 Gloves are recommended, but exposed skin should be washed after use.

Footwear AS –Nzs 2210 Specific footwear is not a requirement but should be chosen to suit the environment you are working in.



Clothing
AS –NZS 3765 No specific clothing required.

Hearing
AS –NZS 1270 Hearing protection not required.

Thermal hazards

No data available

Other Requirements

The type of protective equipment must be selected according to the concentration and amount of the substance at the specific workplace. Avoid unnecessary contact with eyes, skin, and hair. After application, wash skin and hair thoroughly with soap and water. Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Viscous liquid
Appearance	Brown
Odour	Yeasty sweet odour
Odour threshold	No data available
pH @ 20°C (50g/L water)	6.7 – 7.0
Freezing point	<0°C
Initial boiling point	No data available
Partition coefficient: n-octanol/water	No data available
Flash point	No data available
Flammability (solid)	No data available
Upper/lower flammability or explosive limits	No data available
Auto-ignition temperature	No data available
Specific Gravity (relative density) @ 15.6°C	1.06 – 1.07
Solubility	Very soluble in water.
Decomposition temperature	No data available
Evaporation rate	No data available
Vapour density	No data available
Vapour pressure	No data available
Viscosity	>1.0 Pa.s
Biodurability or biopersistence	Readily biodegradable in soil.
Degree of aggregation or agglomeration and dispersibility	No data available. Disperses in water.
Redox potential	No data available
Specific heat value	No data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions. No data available.

Possibility of hazardous reactions

Will not polymerise.

Conditions to avoid

Avoid excessive heat and direct sunlight.

Incompatible materials

No data available.

Hazardous decomposition products

Combustion and decomposition products may include low levels of carbon dioxide (CO₂) and carbon monoxide (CO).

11. TOXICOLOGICAL INFORMATION

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

Ingredient: Mixture	Information Sources: -
Concentration	Microbial nutrient ingredients 40.0 – 50.0% w/w, Water 50.0 – 60.0%w/w
Acute toxicity	No data available
Acute oral toxicity	No data available
Acute dermal toxicity	No data available
Acute inhalation toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No ingredient identified as a probable, possible, or confirmed human carcinogen by IARC.
Reproductive Toxicity	No data available
Specific Target Organ Toxicity STOT - single exposure	No data available
Specific Target Organ Toxicity STOT - repeated exposure	No data available
Aspiration hazard	No data available
Possible routes of exposure	Ingestion.
Signs and Symptoms of exposure	Ingestion may result in nausea and vomiting.
Health Effect from exposure	No data available
Other information	No other information available.
GHS hazard classification	Non-hazardous
GHS hazard statement	Not applicable
Poison Standard (SUSMP)	Not applicable

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available.

Persistence and degradability

No data available. Product is biodegradable.

Bioaccumulative potential

No data available.

Mobility in soil

No data available. Product is soluble in water and expected to penetrate soil profile but not expected to reach ground water.

Other adverse effects

BioMAX MicroLife food is a growth nutrient for the fermentation of beneficial bacteria and fungi. Therefore, will not have any ecological impact on the natural environment unless large quantities are released to waterways.

13. DISPOSAL CONSIDERATIONS

Spills

Collect all residues with absorbent material, dry earth, or sand. After removal of residues wash down area with water. Prevent spills from entering storm water drains and waterways.

Material

Residue can be diluted in water and applied to soil, plants, or added green waste/compost. Disposal of packaging must be carried out in accordance with Local Statuary Authorities.

Contaminated Material and Packaging

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

For the safety of persons conducting disposal, recycling, or reclamation activities, refer to the information in section 8.

14. TRANSPORT INFORMATION

UN number

Not required under ADG Code.

Proper Shipping Name

NOT CONSIDERED DANGEROUS GOODS.

Transport Hazard Class

Not required under ADG Code.

Subsidiary Risk

Not required under ADG Code.

Packing Group

Not required under ADG Code.



Environmental hazards for transport purposes

Not a known marine pollutant according to IMDG Code. Not an Annexe I chemical according to MARPOL.

Special precautions for user

No special precautions required when transporting this material.

Additional information

No additional information required by overseas regulatory agencies or regulations for the transport of goods by other modes.

HAZCHEM

Not required according to ADG Code.

IMDG

Not required according to IMDG Code.

15. REGULATORY INFORMATION

Hazard Category	The product is Classified as a Non-Hazardous Substance in accordance with Safe Work Australia - Hazardous Chemicals Information System (HCIS) Australia, Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
Montreal Protocol	Not an ozone depleting substance.
The Stockholm Convention	Not a persistent organic pollutant.
The Rotterdam Convention	Not a banned pesticide or industrial chemical.
Basal Convention	Not a hazardous waste.
MARPOL	Not Subject to Annexe I - Prevention of pollution by oil and oily water. Subject to Annexe III - Harmful Substances carried in Packaged Form.
Safety, health, and environmental regulations	SUSMP Classification (Aust) - Not a scheduled poison. NICNAS - No data available.
Storage	This product should be stored out of direct sunlight in a cool dry environment.

16. OTHER INFORMATION

This Safety Data Sheet conforms with the "PREPARATION OF SAFETY DATA SHEETS FOR HAZARDOUS CHEMICALS Code of Practice, MAY 2018" by Safe Work Australia. To meet the GHS (Eighth revised edition, 2019) requirements under the WHS regulations in relation to the preparation of safety data sheets for hazardous chemicals.

SDS prepared by LawrieCo Technical Manager 9th July 2020 version number 2.

Legend of Abbreviations and Acronyms

ADG - Australian Dangerous Goods Code for the Transport of Dangerous Goods by Road or Rail.
AS/NZS - Australian Standards and New Zealand Standards.
BCF - Bioconcentration Factor.
CAS Registry Number® - Chemical Abstract Service Registry Number.
CAS RN® - Chemical Abstract Service Registry Number.
GHS - Globally Harmonised System.

HCIS - Hazardous Chemicals Information System.
HSDB - Hazardous Substances Data Bank.
ECHA-CLP - European Chemicals Agency - Classification Labelling Packaging.
NICNAS-IMAP - National Industrial Chemicals Notification and Assessment Scheme - Inventory Multi-tiered Assessment and Prioritisation.
IARC - International Agency for Research on Cancer.
IERG - Initial Emergency Response Guide.
IMDG - International Maritime Dangerous Goods.
MARPOL - International Convention for the Prevention of Pollution from Ships.
OECD - Organisation for Economic Co-operation and development (guidelines for testing of chemicals).
SIDS - Screening Information Data Sets.
TWA - Time-Weighted Average.
SDS - Safety Data Sheet.
STEL -Short Term Exposure Limit.
STOT - Specific Target Organ Toxicity.
SCL - Specific Concentration Limits.
SUSMP - Standards for the Uniform Scheduling of Medicines and Poisons.
S6 - Schedule 6 Poison.
UN Number - United Nations Number.
°C - Degrees Celsius.
EC₅₀ -Half maximal effective concentration.
LD₅₀ - Median lethal dose; is the median dosage per unit bodyweight required to kill half the members of a tested population after specified test duration.
LD₁₀₀ - The lowest dose of a substance that under defined conditions is lethal for 100% exposed animals.
LD_{L0} - Lethal dose low, is the lowest dosage per unit of bodyweight known to have resulted in a fatality in a particular animal species.
LC₅₀ - Median lethal concentration; is the median dosage per unit body weight required to kill half the members of a tested population after a specified test duration.
mg/kg - Milligrams per kilogram.
mg/L - Milligrams per litre.
g/mL - Grams per millilitre.
mg/m³ - Milligrams per cubic metre.
pH - Potential of hydrogen (numeric scale to specify the acidity or basicity of an aqueous solution).
w/w - Weight per weight.
% - Percent or percentage.
< - Less than.
> - Greater than.
@ - at.
mPa·s - Millipascal-second.
Pa·s - Pascal-second.

Emergency Contact
24 hours

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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.

Related Product Codes

No other product codes

Safety Data Sheet Revision

Issue Date: 9th July 2020
Version Number: 2
Revision Number: 1
Reason for Revision: SDS out of date
Previous Versions: Version 1, original (September 2007)
Next Revision Due: July 2025

End of Safety Data Sheet