

MATERIAL SAFETY DATA SHEET**SUBSTANCE IDENTIFICATION AND SUPPLIER**

Product Name:	Hay King Liquid
Other Names:	NA
Recommended Use:	Hay preservative
Company Identification:	BioStart Limited
Address:	227 Top Road PO Box 66 Morrinsville New Zealand
Customer Centre:	+64 7 887 8871
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Telephone Number:	+64 21848342
Transport Emergency:	111 Tell operator what service is needed: Fire, Ambulance, Police

HAZARD IDENTIFICATION

Dangerous Goods:	Not Classified as a Dangerous Good according to NZS 5433:1999 Transport of Dangerous Goods on Land
Hazardous Substances:	Not Classified as Hazardous
HASNO Codes:	Not Classified as Hazardous
Hazardous Statement:	Not Classified as Hazardous
Precautionary Statement:	Keep out of reach of children. Read label before use.

COMPOSITION INFORMATION

ACTIVE INGREDIENT	CAS No.	CONTENT
Non Viable extracts from the fermentation of Enterococcus faecium and Lactobacillus acidophilus.	NA	80%

FIRST AID MEASURES

First Aid Measures:	For advice contact a doctor. Have product container or label at hand.
Inhalation:	Not applicable
Ingestion:	Rinse mouth with water. Give water to drink to achieve dilution.
Skin:	Remove all contaminated clothing and wash before reuse. Wash skin with plenty of soap and water.
Eye:	Rinse cautiously with water for several minutes. Remove contact lenses if present
Advice to Doctor:	Treat symptomatically

FIRE FIGHTING MEASURES

Specific Hazard:	Non combustible liquid
Extinguishing Media:	Not applicable
Fire Fighting Advice:	Not applicable

ACCIDENTAL RELEASE MEASURES

Avoid accident, clean up immediately. Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise your local Regional Council. Collect spilled material into suitable containers and hold for later disposal. Wash area down with excess water. Do not wash material down the drain or sewer.

HANDLING AND STORAGE

Handling:	Before use carefully read product label. Handle in according with good industrial hygiene and safety practice. Avoid skin and eye contact. Wear impervious gloves and safety glasses when handling. Always wash hands and exposed skin through after use.
Storage:	Store in a dry, well ventilated and clean area free from insects and rodent infestation. Keep containers tightly sealed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect from physical damage. Storage temperature should stay between 10-18°C.
Other Information:	Always read the label before use. See label for further information on handling and storage.

EXPOSURE CONTROL/PERSONAL PROTECTION

Workplace Exposure Guidelines:	No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH)
Engineering Controls:	Ensure ventilation is adequate to maintain air flow. Keep containers closed when not in use.

Personal Protective Equipment: Wear overalls, chemical goggles and rubber gloves. Always wash your hands before smoking, eating, drinking or using toilet. Wash contaminated clothing and other protective equipment before storage or reuse.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Brown liquid
Odour: Sweet, slightly earthy odour.
Solubility in Water: 1000 ml/lit at 20°C
Specific Gravity: 1.1 gm/ml
Flash Point: Not applicable
pH: 3.6-4.0
Melting Point: Not applicable
Boiling Point: 100°C
Vapour Pressure: Not applicable

STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions of use and storage.
Reactivity: The solution is neutral.

TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Swallowed: No adverse effect expected, however large amounts may cause irritation of the mouth and throat, or to the stomach.
Eye Contact: Direct contact with eyes may cause slight to mild irritation in some individuals.
Skin Contact: Direct contact with skin may cause slight to mild irritation in some individuals.
Inhaled: Inhalation of spray mist may cause respiratory tract irritation in some individuals.
Long Term Effects: Not known
Toxicological Data: Acute Oral LD50 not known
 Eye Irritation: mild irritant
 Acute Dermal LD50 not known
 Dermal Irritation: Slight to Mild
 Acute Inhalation LD50: not known
 Not a carcinogen, not a teratogenic

ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Aquatic Toxicity: Not known

DISPOSAL INFORMATION

Product Disposal: Recycle wherever possible. Whatever cannot be saved for recovery or recycling should be sent to an approved waste disposal contractor for disposal in an approved waste facility. Care should be taken to ensure compliance with national and local regulations. This product is NOT for disposal via municipal sewer, drains, natural streams or rivers.

Special Precautions: Emptied containers retain product residue. Observe all safeguards on label and in this MSDS until container is cleaned or destroyed. Rinse empty containers with plenty of water. Dispose of washed containers in accordance with local authority requirements, normally at an approved landfill site.