MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT & COMPANY IDENTIFICATION

Product name:	Oenococcus oeni, bacterial cultures, freeze-dried.
Product code:	Several.
Description:	Concentrated bacterial culture, powder.
Product use:	Bacteria for oenology.
Manufacturer:	**Lallemand Inc,** 1620 Prefontaine, Montreal, QUEBEC, Montreal, Quebec, Canada, H1W 2N8.
Person responsible for marketing within the community:	**Danstar Ferment A.G.**, Bahnhofstrae 7C.P. 445CH 6301 Zug, Switzerland.
Person responsible for MSDS preparation:	**Lallemand** Oenology.
Information telephone:	+ 33 5 62 74 55 55
Emergency telephone:	+ 33 5 62 74 55 55
Date of MSDS preparation:	Dec 2007

SECTION II - DATA ON COMPONENTS

Product composition:	Bacterial culture
Microbial concentration:	> 10^8 CFU/gram
Hazardous ingredients:	None

Information on bacterial component, as follows:

Name	CAS #	% by Wt	LD_{50} & LC_{50}	OSHA PEL	ACGIH TLV
Lactic acid bacterial culture	NA		Not established	Not established	Not established

SECTION III – HEALTH HAZARD IDENTIFICATION

Signs and symptoms of overexposure to bacterial powder through primary routes of exposure:

Skin contact:	May cause irritation on prolonged contact.
Eye contact:	May cause eye irritation upon direct contact. Seek medical attention.
Inhalation:	In some cases, repeated exposure may lead to allergic sensitization based on the exposure level, duration and susceptibility of the individual. Subsequent chronic or acute exposure in sensitized persons may cause a respiratory allergic reaction in minutes or delayed, or a mixture of both. Typical symptoms are respiratory irritation, breathlessness, coughing, chest tightness and difficulty breathing.
Ingestion:	Excessive ingestion of highly concentrated bacterial powder could lead to intestinal discomfort (e.g. diarrhea, bloating, cramping, etc.).

SECTION IV – FIRST AID MEASURES (If any symptoms persist, seek medical attention)

Emergency and First aid procedures

Eye contact:	Flush eyes for at least 15 minutes.
Skin contact:	Wash affected area with soap and water.
Inhalation:	Immediately remove person to fresh air.
Ingestion:	Drink plenty of water.

Medical conditions likely to be aggravated by exposure: Asthma.

Delayed effect that can be expected after exposure: Unknown.

SECTION V – FIRE FIGHTING MEASURES

Conditions of flammability:	Unknown.
Extinguishing media:	Water, foam, carbon dioxide, dry powder.
Flash point:	Not applicable.
Flammable limits:	Not applicable.
Autoignition temperature:	No data available.
Hazardous combustion products:	None.
Explosion – sensitivity to mechanical impact:	None.
Explosion – sensitivity to static discharge:	None.
Firefighting procedures:	Use self-contained breathing apparatus (SCBA) when exposed to confined or enclosed fires.

SECTION VI – ACCIDENTAL RELEASE MEASURES

In case material released or spilled, vacuum spill or dilute with water before removal. Collect waste in suitable container and wash surface with water. Avoid high pressure rinsing. Maintain good housekeeping practices. Biodegradable, may be discharged into sewer. No special disposal method required, except that it be in accordance with current local, state/provincial and federal regulations.

SECTION VII – HANDLING & STORAGE

Handling:	Avoid breathing dust. Avoid contact with eyes, skin and clothing. Wear protective equipment described in Section VIII if exposure conditions warrant. Wash thoroughly after handling.
Storage:	Refrigerated and dry conditions recommended. Containers should be kept sealed and dry.

SECTION VIII – EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection:	Protective mask with an assigned protection factor of at least 20 should be worn in conditions of excessive dusting.
Eye contact:	Protective glasses should be worn in conditions of excessive dusting. If eye contact occurs, rinse with water.
Clothing:	Suitable protective clothing. Follow current Good Manufacturing Practices when handling food or dietary supplement ingredients and materials.
Specific engineering controls:	None.
Environmental exposure control	None.

SECTION IX – PHYSICAL & CHEMICAL PROPERTIES

Microbial concentration:	> 10^8 CFU/gram.
Physical state:	Solid (powder).
Appearance:	Fine to granular, ivory to beige powder.
Odour:	Not available.
Odour threshold:	Not applicable.
Specific gravity:	No data available.
Vapour pressure:	Not applicable.
Vapour density:	Not applicable.
Evaporation rate:	Not applicable.
Boiling point:	Not applicable.
Freezing point:	Not applicable.
Melting point:	Mixture.
pH:	No data available.
Partition coefficient:	Not applicable.
Viscosity:	Not applicable.
Solubility in water:	Partially soluble.
Explosive properties	Not applicable.
Oxidising properties	Not applicable.

SECTION X – STABILITY AND REACTIVITY

Stability:	Non-reactive (stable under normal conditions of use).
Incompatibility:	No hazardous incompatibilities. Moisture and high temperatures are detrimental to microbial concentration of product.
Conditions to avoid:	Avoid high humidity.
Materials to avoid	None.
Hazardous decomposition products:	None.
Hazardous polymerization:	None.

SECTION XI – TOXICOLOGICAL INFORMATION

Product recognized as safe.

Effects of short-term exposure:	None.
Effects of long-term exposure:	None.
Irritancy:	Unknown.
Sensitization:	Possible allergic sensitization (see Section III).
Allergy:	May contain dairy and soy products.
Carcinogenicity:	No listed as a carcinogen or potential by the NTP, IARC Monographs or OSHA.
Reproductive toxicity:	Unknown.
Teratogenicity:	Unknown.
Mutagenicity:	Unknown.
Toxicologically synergistic products:	Unknown.

SECTION XII – ECOLOGICAL INFORMATION

Adopt good working practices so that the product is not released into the environment.
No ecological information is available. The substance is unlikely to have a significant effect on the environment.

SECTION XIII – DISPOSAL CONSIDERATIONS

Product can be removed and disposed of in regular trash or waste. No special disposal method required, except that it be in accordance with current local authority regulations.

SECTION XIV – TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION XV – REGULATORY INFORMATION

WHMIS classification for product:	Not a WHMIS regulated product. Product is classified as NIH (National Institute of Health, US) Risk Group I and is not considered to fall within the Canadian *Controlled Products Regulations* criteria for biohazardous infectious materials. This product does not meet the definition of a hazardous material given in the U.S. Occupational Safety and Health Administration's Hazard Communication Standard. This product does not require a registration or Chemical Safety Report under EU Regulation 1907/2006.

The preparation does not contain dangerous ingredients. Refer to the regulations of the country of import.

SECTION XVI – OTHER INFORMATION

The information herein is based on current available data and is believed to be correct. No warranty, express or implied, is made regarding data accuracy, merchantability or hazards associated with product use. The user is responsible for determining product suitability, conditions of use and all associated hazards. Values listed in this document are not product specifications.