

MATERIAL SAFETY DATA SHEET

 Product
Identity

K-Zyme
Section I

Manufacturer's Name Bio Ag Nutrient Solutions Inc.	Emergency Telephone Number (559) 268-2835
Address 4218 W. Muscat Fresno, California 93706	Telephone Number for Information (559) 268-2835
	Date Prepared October 8, 2001

Section II - Hazardous Ingredients/Identity Information

Hazardous Components	C.A.S. No.	OSHA PEL	ACGIH	Other Limits	%
Ascophyllum nodosum	None Available	n/a	n/a	n/a	--
Phenolic Hydrocarbons: Humic acids	None Available	n/a	n/a	n/a	--
Potassium Hydroxide	1310583	1 mg/m ³	2mg/m ³ (TWA)	n/a	--
Sulfate of Potash	7778-80-5				

Section III - Physical/Chemical Characteristics

Boiling Point	100° C	Specific Gravity (H ₂ O = 1)	n/d
Vapor Pressure (mm Hg)	570	Melting Point	n/d
Vapor Density (AIR = 1)	n/d	Evaporation Rate (Butyl Acetate = 1)	n/d
Solubility in Water	98%	Soluble - pH = 9.7	
Appearance and Odor	Brown liquid with a slight ocean type odor.		

Section IV - Fire and Explosion Hazard Data

Flash Point	n/d	Flammable Limits	LEL -	n/d	UEL -	n/d
Extinguishing Media	Use Suitable agent for surrounding fire.					
Special Fire Fighting Procedures	Approved self-contained breathing apparatus for fire fighters. Beware of slippery floors if spillage occurs during fire fighting.					
Unusual Fire and Explosion Hazards	Non-explosive.					

Section V - Reactivity Data

Stability	Stable
Incompatibility	Neutralization reaction will occur if exposed to acidic environment < 4.0
Hazardous Decomposition Byproducts	At extreme temperatures, CO an oxidation product may be evolved.
Hazardous Polymerization	Will not occur

Section VI - Health Hazard Data

Routes of Entry	Inhalation	Skin	Ingestion
	If in mist form	Possible local irritation	Slight hazard
Health Hazards	No LD50 (oral, dermal or inhalation) have been determined.		
Carcinogenicity	Materials in this product are not considered carcinogens or teratogens.		
Signs and Symptoms of Exposure	Possible skin reddening if not washed off affected area, possible stomach disorders if taken orally, lung congestion if breathed.		
Medical Conditions Generally Aggravated	None Known		
Emergency and First Aid Procedures	Eyes - flush with water for 15 minutes. Skin - wash with soap and water. Inhaled - remove to fresh air. Oral - get medical care.		

Section VII - Precautions for safe handling and use

Small Spills should be picked up with paper towels or a mop. Large spills should be wet vacuumed or siphoned into suitable containers for disposal or reclamation.	
Waste Disposal	Check applicable local rules.
Precautions for Handling and Storage	Persons handling product should use proper protective equipment and handle with care. Containers should be stored in a cool dry area to minimize product expansion and possible leakage. If storage container appears swollen or enlarged open with caution, the contents may be under pressure. Mix well before using.
Other Precautions	None considered necessary.

Section VIII - Control Measures

Respiratory Protection	None considered necessary.
Ventilation	Natural ventilation is usually adequate.
Protective Gloves	Rubber or plastic.
Eye Protection	Chemical goggles.
Other Protective Clothing or Equipment	Eye bath, shower, oxygen mask should be available.
Work Hygienic Practices	Wash hands and clothing after handling product.