MATERIAL SAFETY DATA SHEET

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Bioscience Inc. 1550 Valley Center Parkway, Suite 140 Bethlehem, PA 18017 Creation Date:

Review Date: 01/07

03/00

Information Phone Number: 800-627-3069 Emergency Phone Number: 800 424-9300

Commercial Product Name: MICROCAT®-AL Pond and Lake Treatment

Chemical Characterization: Inorganic flocculant aids with non-pathogenic, naturally-occurring microorganisms absorbed on wheat bran and corn gluten.

SECTION II - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients :	<u>% by wt.</u>	CAS Number:		TLV (ACGIH):	PEL (OSHA):	
Dolomite	20-40	16389-88-1		10 mg/m ³	5 mg/m^3	
Crystalline silica	< 0.2	14808-60-7		0.1 mg/m^3	0.1 mg/m^3	
Aluminum sulfate	<10	10043-01-3		TWA:2 mg/ m ³		
Protease	1	9014-01-1		$.00006 \text{ mg/m}^3$ (as	pure protease)	
Amylase	1	9000-90-2		none established		
Non-hazardous Ingredients: M	icroorganism	ns and degradative e	nzymes absorbe	d on		
Wheat bran	116469-86-4		10 mg/m^3	10 mg/m ³ (nuisance dust)		
Corn gluten		66071-96-3	10 mg/m ³	(nuisance dust)		
Ground and dehydr		10 mg/m ³ (nuisance dust)				
Diatomaceous earth		91053-39-3				

This product may contain low concentrations of crystalline silica in the forms of quartz, cristobalite, and/or tridymite. The PEL for crystalline silica respirable dust is 10 mg/ $m^3/(\% SiO_2 + 2)$ if present as quartz. The comparable PEL for total dust is 30 mg/ $m^3/(\% SiO_2 + 2)$. Use half the calculated value if cristobalite or tridymite is detected

SECTION III - HAZARD IDENTIFICATION AND FIRST AID PROCEDURES

The microbes in this product are Class 1 microbes, defined by the US Centers for Disease Control as not likely to cause disease in healthy humans and animals. However, persons who have a compromised immune system or a history of severe allergic response should avoid contact with open wounds and/or breathing dust or mist from product handling or manufacturing processes.

INHALATION:	May cause irritation of respiratory tract. Avoid product handling which results in dust generation. If inhaled, remove from
	contaminated area to fresh air. Report situation. Seek medical attention if allergic response or difficulty in breathing is
	exhibited.
EYE CONTACT:	May cause eye irritation or injury. In case of contact with eyes, flush eyes with water for at least 15 minutes and seek
	medical attention.
SKIN CONTACT:	May cause skin irritation. It is recommended that prolonged direct contact with skin be avoided. In case of contact with
	skin, wash skin with soap and water. Remove contaminated clothing and wash.
SWALLOWING:	Ingestion of material may cause gastric disturbance, irritation. If swallowed, rinse mouth and throat with tap water.
	Consult physician if symptoms persist.

SECTION IV - FIRE FIGHTING MEASURES

 HMIS Rating: Health – 1
 Flammability – 1
 Reactivity - 0

 Flash Point: Not Available
 Flammable Limits:
 Not Available
 Extinguishing Media: Dry chemical, carbon dioxide, water spray or foam

SECTION V - ACCIDENTAL RELEASE MEASURES

 AFTER SPILLAGE:
 Spilled product should be removed immediately to avoid formation of dust. Store in suitable container. Wash down with water. Dispose to landfill. Provide sufficient ventilation.

 FIRST AID:
 In case of contact with skin, wash with soap and water. If symptoms occur, seek medical attention. In case of contact with eyes, rinse with plenty of water for at least 15 minutes and see an eye specialist if irritation persists. In case of inhalation, remove to fresh air. In case of ingestion, drink water. If symptoms occur, seek medical assistance.

SECTION VI – PERSONAL PROTECTION/HANDLING AND STORAGE

TECHNICAL PROTECTIVE MEASURES: Avoid dust. Adequately ventilate when handling this product. Provide eyewash capability. RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY PROTECTION:	Dust mask				
SKIN PROTECTION:	Wear long-sleeve shirt and trousers or coveralls, safety shoes, gloves				
EYE PROTECTION:	Safety goggles				
INDUSTRIAL HYGIENE: Maintain	good housekeeping. Avoid dusty conditions. Wash hands and exposed skin after contact.				
Avoid contact with food or food preparation surfaces. Remove and wash contaminated clothing.					

PROTECTION AGAINST FIRE AND EXPLOSIONS: No special requirements. Contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

SECTION VII - PHYSICAL PROPERTIES

Color: Tan Solubility in Water: ~10% of product is water soluble Form: Granular Powder Alternative Solvent: N/A Odor: Mild Odor pH Value (1% sol.): N/A

SECTION VIII - TOXICOLOGICAL INFORMATION

Inhalation of dust resulting from inappropriate handling may cause respiratory allergy in susceptible individuals.

Carcinogenicity: Crystalline silica probably carcinogenic NTP: x IARC Monographs: x OSHA Regulated: Product may contain <1% crystalline silica (CS). IARC has classified CS as probably carcinogenic for humans (2A). NTP lists CS as a substance which may reasonably be anticipated to be a carcinogen. CS is a known cause of silicosis (a non-cancerous lung disease).

Carcinogenicity: This product contains crystalline silica which is considered a health hazard by inhalation. IARC reviewed the literature (Oct., 1996) for polymorphs of crystalline silica and determined that: 1) There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica. 3) There is sufficient evidence in experimental animals for the carcinogenicity of tridymite. 5) There is inadequate evidence in experimental animals for the carcinogenicity of diatomaceous earth. 6) There is inadequate evidence in experimental animals for the carcinogenicity of sythetic amorphous silica.

Overall evaluation: Inhaled crystalline silica in the form of quartz and cristobalite from occupational sources is carcinogenic to humans (Group 1).

SECTION IX - INFORMATION ON ECOLOGICAL EFFECTS

Application of product to potential drinking water sources shall not exceed residual aluminum concentration of 2 mg/m³.

SECTION X - DISPOSAL CONSIDERATIONS

Disposal: Dispose of in accordance with current local authority regulations.

SECTION XI - TRANSPORT CLASSIFICATION

DOT Hazard Class: N/A DOT Label: N/A DOT Proper Shipping Name: Chemicals not other wise indexed (NOI) non-hazardous

SECTION XII - REGULATORY INFORMATION

None of the components present in this product are at a level that requires identification under: 1) CERCLA, 2) SARA Title III, 3) 40 CFR 372 (for SARA), or 4) TSCA.

Canadian WHMIS: Controlled product Hazard Class D2A (respiratory sensitizer) Canadian WHMIS: Toxic Class D2B (eye irritant) Quartz is on Canadian WHMIS (Workplace Hazardous Material Information System) Ingredient Disclosure System, Massachusetts Substance List, New Jersey Right to Know Hazardous Substance List, and Pennsylvania Hazardous Substance List.

SECTION XIII - FURTHER INFORMATION

The information contained in this Safety Data Sheet, as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of our company, it is the responsibility of the user to determine the conditions of safe use of this product. The information in this sheet does not represent analytical specifications; for this information contact Bioscience, Inc. Technical Department. AL 070131