



SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200; GHS 4th Revision

SECTION 1 IDENTIFICATION

Product Name	MICROCAT®-XNL / XNC Ammonia Oxidizing Bioformula
Identified uses	Used in biological wastewater treatment plants receiving wastes containing ammonia.
Company	Bioscience, Inc. 2201 Hangar Place, Suite 200 Allentown, PA 18109 Phone: (800) 627-3069 (484) 245-5232
Website	http://www.bioscienceinc.com

SECTION 2 HAZARD IDENTIFICATION

Hazard Classification	Category	H-statement
Acute Toxicity – Inhalation	5	H333

Hazard pictograms



Signal words	Warning
Hazard statements	May be harmful if inhaled (H333)
Precautionary statements	P304 + P312 – IF INHALED: Call a POISON CENTER or doctor if feeling unwell.
Further information	
Other hazards	May aggravate asthmatic, bronchial systems

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity

Common name

Synonyms

Naturally occurring microbial suspension in water.

Hazardous Components

Chemical Name (Concentration)

CAS-No

None

Non-Hazardous Components

Name

CAS-No

Viable bacterial cultures (nitrifying) in water (> 95%)

7732-18-5

Ammonia salts (Trace)

Nitrate salts (Trace)

SECTION 4 FIRST-AID MEASURES

Eye	Product is not known to cause eye irritation. However, it is recommended that direct contact with eyes be avoided. In case of contact with eyes, flush eyes with low pressure water for at least 15 minutes. If irritation persists, seek medical attention.
Skin	May lead to opportunistic infection of broken skin. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash. If irritation persists seek medical attention.
Inhalation	May aggravate asthmatic, bronchial systems. If inhaled, remove from contaminated area to fresh air. Report situation. Seek medical attention if allergic response exhibited.
Ingestion	Ingestion of material may cause gastric disturbance. If swallowed, rinse mouth and throat with tap water. Seek medical attention.
Most important symptoms/effects, acute and delayed	
Further information	

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical, CO₂, chemical foam or water fog
Specific hazards arising from the chemical
Special protective actions for fire-fighters

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Advice for emergency responders: protective equipment see section 8.
Environmental precautions
Methods and materials for containment and cleaning up Wash down area with detergent and thoroughly rinse. Dispose to treatment plant or soil.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling Safety glasses or eye shield recommended.
Conditions for safe storage, including any incompatibilities No special requirements.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Name	CAS-No	TLV (ACGIH)	PEL (OSHA)
Viable bacterial cultures (nitrifying) in water	7732-18-5	None established	None Established
Ammonia salts		35 mg/m ³ (ammonia)	Ammonia salts
Nitrate salts		5 mg/m ³ (nitric acid)	Nitrate salts

* Specific limits not set for these chemicals. Limits are shown for Particles Not Otherwise Regulated (PNOR) or Particles Not Otherwise Classified (PNOC). First number is for total dust second number { } is for respirable dust

Personal Safety Equipment

Eye Protection Safety glasses
Skin Protection Not required
Respiratory protection None required provide adequate ventilation.
Industrial Hygiene Maintain good housekeeping. Wash hands and exposed skin after contact. Avoid contact with food or food preparation surfaces. Remove and wash contaminated clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light pink to red liquid
Odour	mild odor
Odour threshold	Information not available
pH	6 – 8
Melting point /Freezing Point	Information not available
Initial Boiling point and boiling point range	Information not available
Flash Point	Information not available
Evaporation rate	Information not available
Flammability (solid; gas)	Information not available
Upper/lower flammability or explosive limits	Information not available
Vapour pressure	Information not available
Vapour density	Information not available
Relative density	Information not available
Solubility (ies)	99%
Partition coefficient: n-octanol/water	Information not available
Auto-ignition temperature	Information not available
Decomposition temperature	Information not available
Viscosity	Information not available
Other Physical/Chemical Properties	Information not available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Stable under normal use and conditions.
Possibility of hazardous reactions	Information not available
Conditions to avoid	Freezing or temperature greater than 100°F (40°C).
Incompatible materials	Strong acids, bases or oxidizers.
Hazardous decomposition products	Information not available

SECTION 11 TOXOLOGICAL INFORMATION

Acute toxicity	Information not available
Skin Corrosion/Irritation	May exhibit dermal sensitivity.
Serious Eye Damage/Irritation	May be infected by viable organisms.
Respiratory or Skin Sensitization	Coughing, shortness of breath may occur.
Ingestion	Gastric disturbance on massive ingestion.
Germ Cell Mutagenicity	Information not available
Carcinogenicity	NTP: no IARC Monographs: No OSHA Regulated: No
Reproductive Toxicity	Information not available
Specific Target Organ Toxicity – Single Exposure	Information not available
Specific Organ Toxicity – Repeated Exposure	Information not available
Aspiration Hazard	Information not available
General Remarks	May experience allergic reaction on contact.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	Information not available
Persistence and degradability	Readily biodegradable
Bioaccumulative potential	Information not available
Mobility in Soil	Information not available
Other adverse effects	Information not available

SECTION 13 DISPOSAL CONSIDERATIONS

Methods	Dispose of all wastes in accordance with all Federal, state and local agencies.
Containers	n/a

SECTION 14 TRANSPORTATION INFORMATION

UN Number	Mixture not classified as Hazardous according to Regulation (EC) 1272/2008.
UN Proper Shipping Name	n/a
Transport Hazard Class	n/a
Packing Group (if applicable)	n/a
Environmental Hazards	n/a
Special Precautions for User	n/a
Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code	n/a
DOT Proper Shipping Name	Chemicals not otherwise indexed (NOI) non-hazardous.

SECTION 15 REGULATORY INFORMATION

EU Directive 2000_54 regarding risks from biological agents: micro-organisms in Class 1 may be used without restriction.

WGK (Water Hazards Class): 0 non-hazardous to water

SECTION 16 OTHER INFORMATION

Key: N/A, n/a – Not available

Observe employment restrictions for people.

Components not precisely identified are proprietary or non-hazardous. All chemical ingredients appear on the EPA TSCA inventory.

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, contact with open wounds should be avoided; persons who have a compromised immune system or a history of severe allergic response should avoid contact and/or breathing dust or mist from product handling or manufacturing processes.

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.