



SAFETY DATA SHEET

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

SECTION 1 IDENTIFICATION

Product Name	MICROCAT®-ANL Odor Control Bioformula
Identified uses	Used in sludge, compost, contaminated soils and wastewaters to suppress hydrogen sulfide odors and enhance biodegradation and contaminant removal where oxygen is of limited availability.
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
Eye Irritant	2B	Causes eye irritation (H320)
Skin sensitization	1A	May cause an allergic skin reaction (H317)

Hazard pictograms



Signal words

Warning

Hazard statements

Causes eye irritation (H320)
May cause an allergic skin reaction (H317)

Precautionary statements

Avoid breathing fumes or vapors. (P261)
Wash hands thoroughly after handling. (P264)
Contaminated work clothing should not be allowed out of the workplace. (P272)
Wear protective gloves. (P280)
IF ON SKIN: Wash with soap and plenty of water. (P302 + P352)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305 + P351 + P338)
If skin irritation or rash occurs, get medical advice/attention. (P333 + P313)
If eye irritation persists, get medical advice/attention. (P337 + P313)
Take off contaminated clothing and wash it before reuse. (P362 + P364)
Dispose of contents/container in accordance with local, regional, national, and international regulations. (P501)

Further information
Other hazards

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity	Water solution/suspension
Common name	
Synonyms	Microbial suspension in aqueous medium
Hazardous Components	
Chemical Name (Concentration)	CAS-No
None	
Non-Hazardous Components	
Name	CAS-No
Water	

SECTION 4 FIRST-AID MEASURES

Eye	Flush eyes with water for at least 15 minutes, seek medical attention.
Skin	Wash skin with soap and water, remove contaminated clothing.

Inhalation Remove individual to fresh air. If allergic response or difficulty breathing is exhibited, seek medical attention.
 Ingestion If swallowed, drink water, if symptoms persist consult a physician.
 Most important symptoms/effects, acute and delayed
 Further information

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media Product is not flammable, Use extinguishers suited to surrounding area
 Specific hazards arising from the chemical Flash Point > 200°F
 Special protective actions for fire-fighters

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Provide adequate ventilation
 Environmental precautions
 Methods and materials for containment and cleaning up Use absorbent material to collect and contain for disposal. Contain large spills and pump to suitable tank for reuse. Wash down with detergent and thoroughly rinse.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling Chemical worker goggles and vinyl or rubber gloves recommended. Eye wash and safety shower in work area
 Conditions for safe storage, including any incompatibilities Recommended storage 5-40°C

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Name	% by Weight	TLV (ACGIH)	PEL (OSHA)

* 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 Rubber or vinyl gloves, long-sleeve shirt, trousers, and/or coveralls
 Respiratory protection Canister (H₂S absorbent) for extended work in large volumes. Provide adequate ventilation.
 Industrial Hygiene

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light grey turbid liquid
Odour	Light sulfide odor
Odour threshold	Information Not Available
pH	6 – 8
Melting point /Freezing Point	Information Not Available
Initial Boiling point and boiling point range	100°C +/- 2
Flash Point	> 100°C
Evaporation rate	Approximately equal to water
Flammability (solid; gas)	Information Not Available
Upper/lower flammability or explosive limits	Information Not Available
Vapour pressure	Approximately equal to water
Vapour density	Information Not Available
Relative density	Information Not Available
Solubility (ies)	Soluble with < 1% suspended matter
Partition coefficient: n-octanol/water	Information Not Available
Auto-ignition temperature	Information Not Available
Decomposition temperature	Information Not Available
Viscosity	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 lead to opportunistic infection of broken skin
Serious Eye Damage/Irritation	Information Not Available
Respiratory or Skin Sensitization	Information Not Available
Ingestion	Ingestion of large quantities may cause gastric distress.
Germ Cell Mutagenicity	Information Not Available
Carcinogenicity	Information Not Available
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 induce allergic response for susceptible individuals

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	Non-toxic
Persistence and degradability	Product is readily biodegradable
Bioaccumulative potential	Information Not Available
Mobility in Soil	Information Not Available
Other adverse effects	None known

SECTION 13 DISPOSAL CONSIDERATIONS

Methods	Dispose of in accordance with current local authority regulations. Dispose liquid to local wastewater treatment plant or, for absorbent/contained material, to sanitary landfill.
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.

Canada WHIMS: toxic class D2B (eye irritant)

All ingredients used are listed on the USEPA TSCA Inventory list

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