



## SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200; GHS 4<sup>th</sup> Revision

### SECTION 1 IDENTIFICATION

Product Name	<b>MICROCAT® - ST Septic Tank Bioformula</b>
Identified uses	Toilet/septic tank deodorizer and activator.
Company	Bioscience, Inc. 2201 Hangar Place, Suite 200 Allentown, PA 18109 Phone: (800) 627-3069 (484) 245-5232
Website	www.bioscienceinc.com

### SECTION 2 HAZARD IDENTIFICATION

Hazard Classification	Category	H-statement
Skin Irritant	2	H315
Eye irritant	2A	H319

#### Hazard pictograms



#### Signal words

Warning

#### Hazard statements

Causes skin irritation (H315)  
Causes serious eye irritation (H319)

#### Precautionary statements

P264 – Wash thoroughly with soap and water after handling.  
P280 – Wear protective gloves, eye and/or face protection.  
P302 + P352 – IF ON SKIN: Wash with soap and plenty of water.  
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing;  
P332 + P313 – If skin irritation occurs: Get medical advice/attention.  
P337 + P313 – If eye irritation persists: get medical advice/attention.  
P362 + P364 – Take off contaminated clothing and wash before reuse.

#### Further information

Crystalline silica is a known cause of silicosis (a non-cancerous lung disease). Prolonged and/or repeated inhalation must be avoided.

#### Other hazards

### SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

#### Chemical Identity

##### Common name

##### Synonyms

Nonpathogenic, naturally occurring bacteria and degradation enzymes with chemical nutrients and enhancers.

#### Hazardous Components

##### Chemical Name (Concentration)

Chemical Name (Concentration)	CAS-No
Dolomite (< 55%)	16389-88-1
Urea (< 10%)	57-13-6
Protease (1%)	9014-01-1
Amylase (1%)	9000-90-2
Ferrous sulfate (1%)	7782-63-0
Crystalline silica (< 0.5%)	14808-60-7

#### Non-Hazardous Components

##### Name

Name	CAS-No
Wheat bran	116469-86-4
Corn gluten	66071-96-3
Diatomaceous Earth	91053-39-3
Diammonium phosphate (< 1%)	7783-28-0

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## SECTION 4 FIRST-AID MEASURES

Eye	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	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.
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.
Ingestion	Ingestion of material may cause gastric disturbance, irritation. If swallowed, rinse mouth and throat with tap water. Consult physician if symptoms persist.
Most important symptoms/effects, acute and delayed	
Further information	

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## SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO <sub>2</sub> , water spray or foam.
Specific hazards arising from the chemical	
Special protective actions for fire-fighters	Some toxic fumes may be generated by thermal decomposition. Wear MSHA/NIOSH approved self-contained breathing apparatus and/or stay up-wind from fire.

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## SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures	Use with adequate ventilation, provide eyewash capability. Avoid creating dust.
Environmental precautions	
Methods and materials for containment and cleaning up	Spilled product should be removed immediately to avoid formation of dust. Contain spill, sweep up avoiding airborne dust. Provide sufficient ventilation.

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## SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	Provide eye wash capability. Avoid creating dust, adequately ventilate while handling.
Conditions for safe storage, including any incompatibilities	No special requirements for fire protection as product is not readily combustible. Do not mix with acids or carbon dioxide evolution may pressurize closed container.

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## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control Parameters

Name	% by Weight	TLV (ACGIH)	PEL (OSHA)
Dolomite	< 55	10 mg/m <sup>3</sup>	5 mg/m <sup>3</sup>
Crystalline silica	< 0.5	0.1 mg/m <sup>3</sup>	0.1 mg/m <sup>3</sup>
Protease	1	0.00006 mg/m <sup>3</sup> (as pure protease)	
Amylase	1	None established	
Urea	< 10	10 mg/m <sup>3</sup> {3}*	15 mg/m <sup>3</sup> {5}*
Ammonium phosphate	< 10	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>
Ferrous sulfate	1	≤ 1 mg/m <sup>3</sup>	
Wheat bran		10 mg/m <sup>3</sup> (nuisance dust)	
Corn gluten		10 mg/m <sup>3</sup> (nuisance dust)	
Diatomaceous earth		10 mg/m <sup>3</sup> (nuisance dust)	

\* 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 with side shields or face shield.
Skin Protection	Wear long-sleeve shirt, trousers, safety shoes, rubber or vinyl gloves.
Respiratory protection	Dust mask or respirator for particle removal (NIOSH).
Industrial Hygiene	Maintain good housekeeping. Avoid dusty conditions. Wash hands and exposed skin after contact. Avoid contact with food or food preparation surfaces. If exposure of food surfaces occurs, wash with germicidal detergent or chlorine bleach. Remove and wash contaminated clothing.

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## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Tan granular powder
Odour	Mild odor
Odour threshold	Information not available
pH	4.5 (10% suspension)
Melting point /Freezing Point	> 100°C
Initial Boiling point and boiling point range	Does Not Apply
Flash Point	Does Not Apply
Evaporation rate	Does Not Apply
Flammability (solid; gas)	Information not available
Upper/lower flammability or explosive limits	Does Not Apply
Vapour pressure	Does Not Apply
Vapour density	Does Not Apply
Relative density	Information not available
Solubility (ies)	approximately 60%; individual components may exceed 100g/100g water at 20°C
Partition coefficient: n-octanol/water	Does Not Apply
Auto-ignition temperature	Information not available
Decomposition temperature	Information not available
Viscosity	Does Not Apply
Other Physical/Chemical Properties	Information not available

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## SECTION 10 STABILITY AND REACTIVITY

Reactivity	Stable under normal storage and usage conditions.
Possibility of hazardous reactions	Information not available
Conditions to avoid	Freezing or temperature greater than 100°F (40°C). Do not mix with acids or carbon dioxide evolution may pressurize closed container.
Incompatible materials	Strong acids, bases or oxidizers.
Hazardous decomposition products	Information not available

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## SECTION 11 TOXOLOGICAL INFORMATION

Acute toxicity	Inhalation of dust resulting from inappropriate handling may cause respiratory allergy in susceptible individuals.
Skin Corrosion/Irritation	Product may cause skin irritation.
Serious Eye Damage/Irritation	Product may cause eye irritation.
Respiratory or Skin Sensitization	May cause sensitization by inhalation in hypersensitive individuals.
Ingestion	may cause mouth and throat irritation and/or gastric disturbance.
Germ Cell Mutagenicity	Information not available
Carcinogenicity	Crystalline silica probably carcinogenic NTP: See below IARC Monographs: See below OSHA Regulated: Yes 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).
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	

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## SECTION 12 ECOLOGICAL INFORMATION

Toxicity	Product will have no adverse environmental effects when used as directed.
Persistence and degradability	Organic matter in product is biodegradable.
Bioaccumulative potential	Information not available
Mobility in Soil	Information not available
Other adverse effects	Information not available

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### SECTION 13 DISPOSAL CONSIDERATIONS

Methods	Dispose with municipal or domestic waste in accordance with current Federal, State, and Local regulations.
Containers	n/a

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### SECTION 14 TRANSPORTATION INFORMATION

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

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### 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.

All ingredients used are listed on the USEPA TSCA Inventory list.

Canadian WHMIS: Toxic Class D2B (eye irritant)

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### SECTION 16 OTHER INFORMATION

Key: N/A, n/a – Not available

*Product is not listed with IARC, NTP, ACGIH or OSHA as a carcinogen.*

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.