



SAFETY DATA SHEET

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

SECTION 1 IDENTIFICATION

Product Name	MICROCAT®- DNTRF Special Drain & Trap Bioformula
Identified uses	For liquefying and degrading greases and fats and maintaining plumbing systems and collection systems free of blockages.
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 irritation	2B	H320
Skin irritation	3	H315

Hazard pictograms



Signal words

Warning

Hazard statements

Causes eye irritation (H320)
Causes skin irritation (H315)

Precautionary statements

P264 – Wash thoroughly after handling.
P280 – Wear protective gloves.
P302 + P352 – IF ON SKIN, wash with soap and plenty of water.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. 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 it 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

Hypersensitive individuals are more at risk for sensitization

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity

Common name

Synonyms

Non-pathogenic, naturally-occurring microorganisms and degradation enzymes absorbed on wheat bran and corn gluten, mixed with carbonate salts

Hazardous Components

Chemical Name

CAS-No

(Concentration)

Dolomite (50%)	16389-88-1
Crystalline silica (<0.1)	14808-60-7
Protease (< 1%)	9014-01-1
Amylase (<1%)	9000-90-2
Diammonium Phosphate (<1%)	7783-28-0

Non-Hazardous Components

Components

Name

CAS-No

Wheat bran	116469-86-4
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Corn gluten 66071-96-3
 Diatomaceous earth 91053-39-3
 Bicarbonate Salts 144-55-8

SECTION 4 FIRST-AID MEASURES

Eye Product may cause eye irritation. Direct contact with eyes should be avoided. In case of contact with eyes, flush eyes with water for at least 15 minutes. If irritation persists, seek medical attention.

Skin Product may cause skin irritation. Direct contact with skin should be avoided. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash. Seek medical attention.

Inhalation May cause sensitization by inhalation in hypersensitive individuals. Avoid product handling which results in dust generation. If inhaled, remove from contaminated area to fresh air. Report situation. Take individual to emergency room if symptoms of sensitization or irritation occur.

Ingestion Ingestion of material may cause mouth and throat irritation and/or gastric disturbance. If swallowed, rinse mouth and throat with tap water. Drink water.

Most important symptoms/effects, acute and delayed
 Further information

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media Dry chemical, carbon dioxide, chemical foam or water fog

Specific hazards arising from the chemical

Special protective actions for fire-fighters No special requirements. Organic dusts are a weak explosion hazard. Not hazardous under normal storage and use conditions

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures Provide sufficient ventilation

Environmental precautions None

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.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling Avoid formation of dust. Provide adequate ventilation of the room when handling this product. Provide eyewash capability.

Conditions for safe storage, including any incompatibilities None

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Name	% by Weight	TLV (ACGIH)	PEL (OSHA)
Dolomite	50	10 mg/m ³	5 mg/m ³
Crystalline silica	<0.1	0.1 mg/m ³	0.1 mg/m ³
Protease	< 1	.00006 mg/m ³ (as pure protease)	
Amylase	< 1	None established	
Diammonium Phosphate	< 1	10 mg/m ³ {3}*	15 mg/m ³ {5}*
Wheat bran		10 mg/m ³ (nuisance dust)	
Corn gluten		10 mg/m ³ (nuisance dust)	
Ground and dehydrated algae		10 mg/m ³ (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, gloves (rubber or vinyl).

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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Whitish tan fine powder
Odour	Yeast odor
Odour threshold	Information not available
pH	6 – 9
Melting point /Freezing Point	Information not available
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)	< 60% in water
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

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Stable under normal conditions and use.
Possibility of hazardous reactions	None known
Conditions to avoid	Freezing or temperature greater than 100°F (40°C)
Incompatible materials	Strong acids, bases or oxidizers
Hazardous decomposition products	None known

SECTION 11 TOXOLOGICAL INFORMATION

Acute toxicity	Information not available
Skin Corrosion/Irritation	Information not available
Serious Eye Damage/Irritation	Information not available
Respiratory or Skin Sensitization	May cause respiratory allergy in susceptible individuals (shortness of breath, wheezing, labored coughing)
Ingestion	Information not available
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	Enzymes in this product are non-toxic (LD 50 >2 g/kg in rats).

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 Containers	Dispose of in accordance with current Federal, State, and Local regulations.
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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	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

Canadian WHMIS: Controlled product Hazard Class D2A (respiratory sensitizer); Toxic Class D2B (eye irritant)

All ingredients used are listed on the USEPA TSCA Inventory list

SECTION 16 OTHER INFORMATION

Key: N/A, n/a – Not available

Mixture classified as not dangerous according to Regulation (EC) 1272/2008.

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.