MONERA TECHNOLOGIES CORPORATION
ISO 9001:2015 Certified

SAFETY DATA SHEET

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

SECTION 1 IDENTIFICATION

Product Name	**MICROCAT® - TM Trace Nutrient Blend for Biodegradation**
Identified uses	Micronutrient blend for biodegradation and bioremediation programs.
Company	Monera Technologies Corporation 2201 Hangar Place, Suite 200 Allentown, PA 18109 Phone: (800) 627-3069 (484) 245-5232 www.moneratec.com

SECTION 2 HAZARD IDENTIFICATION

Hazard Classification	Category	H-statement
Skin irritant	2	H315
Eye irritant	2A	H319
Sensitization – respiratory	1B	H334
Specific Target Organ Toxicity – Single	2	H371

Hazard pictograms

Signal words Warning

Hazard statements
Causes skin irritation (H315).
Causes serious eye irritation (H319).
May cause allergy or asthma symptoms or breathing difficulties if inhaled (H334).
May cause damage to organs (H371).

Precautionary statements
Do not breathe dust (P260).
Wash thoroughly after handling (P264).
Do not eat, drink or smoke when using this product (P270).
Wear eye protection, face protection and protective gloves (P280).
Wear respiratory protection (P284).
IF ON SKIN: Wash with soap and plenty of water (P302 + P352).
IF INHALED: remove person to fresh air and keep comfortable for breathing (P304 + P340).
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 exposed or concerned: Call a POISON CENTER or doctor (P308 + P311).
If skin irritation occurs: Get medical advice/attention (P332 + P313).
If eye irritation persists: Get medical advice/attention (P337 + P313).
If experiencing respiratory symptoms: Call a POISON CENTER or doctor (P342 + P311).
Take off contaminated clothing and wash it before reuse (P362 + 364).
Store locked up (P405).
Dispose of contents/container in accordance with local, regional, and federal regulations (P501).

Further information: 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.

Other hazards

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity
Common name
Synonyms Calcium and magnesium carbonates, iron salts and organic nutrients

Hazardous Components

Chemical Name (Concentration)	CAS-No	Hazard
*Dolomite (*40%)	16389-88-1	H334
Crystalline silica (< 0.1%)	14808-60-7	H371
Ferrous sulfate heptahydrate (<10%)	7782-63-0	H315,H319

Non-Hazardous Components

Name	CAS-No
Diatomaceous Earth Ground and dehydrated algae	91053-39-3

SECTION 4 FIRST-AID MEASURES

Eye	May cause eye irritation or injury. In case of contact with eyes, flush eyes with low pressure water for at least 15 minutes and 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.
Inhalation	May cause irritation of respiratory tract. Avoid inappropriate handling which may result 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. Give artificial respiration if not breathing.
Ingestion	Ingestion of material may cause gastric disturbance, irritation, shock, liver damage, tachycardia, and death. If swallowed, rinse mouth and throat with tap water. Never give anything by mouth to unconscious person. Cover victim if in shock. Remove to physicians care.
Most important symptoms/effects, acute and delayed	Sensitization (shortness of breath, wheezing, and labored coughing) take individual to emergency room.
Further information	When consulting a physician, show this SDS to attending doctor. Move out of dangerous area.

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use dry chemical, carbon dioxide, chemical foam or water spray or foam.
Specific hazards arising from the chemical	Burning may produce sulfur and iron oxides, carbon monoxide.
Special protective actions for fire-fighters	No special requirements. This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures	Provide sufficient ventilation. Advice for emergency responders: protective equipment see section 8.
Environmental precautions	Do not allow product to enter drains.
Methods and materials for containment and cleaning up	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.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	Avoid creating dust. Adequately ventilate when handling this product. Provide eyewash capability.
Conditions for safe storage, including any incompatibilities	Store in a suitable container, No special requirements. This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Name	CAS-No	TLV (ACGIH)	PEL (OSHA)
Dolomite	16389-88-1	10 mg/m³	5 mg/m³
Crystalline silica	14808-60-7	0.1 mg/m³	0.1 mg/m³
Ferrous sulfate heptahydrate	7782-63-0	1 mg/m³	1 mg/ m³

Ground and dehydrated algae		10 mg/m^3 (nuisance dust)	
Diatomaceous earth	91053-39-3	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 and 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. Remove and wash contaminated clothing.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Light brown granular powder
Odour	mild fishy odor
Odour threshold	Information Not Available
pH	5.0 (5% suspension)
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	11 mm Hg @25°C
Vapour density	Information Not Available
Relative density	Information Not Available
Solubility (ies)	30% (up to 57 g/ 100mL soluble in hot 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	Information Not Available
Conditions to avoid	Moisture absorption may cause spoilage of organic matter.
Incompatible materials	Alkalis, soluble carbonates, oxidizing materials.
Hazardous decomposition products	Burning may produce sulfur oxides, iron oxides carbon monoxide.

SECTION 11 TOXOLOGICAL INFORMATION

Acute toxicity	Oral - >10,000 mg/m^3 (mouse oral LD50)
Skin Corrosion/Irritation	Redness, itching and pain.
Serious Eye Damage/Irritation	Redness, irritation and pain.
Respiratory or Skin Sensitization	Irritation, coughing, shortness of breath
Ingestion	Ingestion of material may cause gastric disturbance, irritation shock, liver damage, tachycardia, and death.
Germ Cell Mutagenicity	Information Not Available
Carcinogenicity	No component >0.1% identified as known or anticipated carcinogen
Reproductive Toxicity	Information Not Available
Specific Target Organ Toxicity – Single Exposure	Information Not Available
Specific Organ Toxicity – Repeated Exposure	Crystalline silica is a known cause of silicosis, a non-cancerous lung disease.
Aspiration Hazard	Information Not Available
General Remarks	Information Not Available

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	Application of product to potential drinking water sources shall not exceed residual iron concentration of 0.3 mg/m^3.
Persistence and degradability	Information Not Available

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.
Reportable quantity (RQ):	n/a
IMDG/IATA	Not dangerous goods

SECTION 15 REGULATORY INFORMATION

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

SARA 302 Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimus) reporting levels of SARA Title III, Section 313.

SARA 311/313 Hazards: Acute health hazard

Massachusetts, Pennsylvania, and New Jersey Right-to-know Components: Ferrous sulfate heptahydrate; CAS No.7782-63-0; Revision date: 1993-04-24

CERCLA - 49 CFR Ch. 1 (10-1-08 Edition) Section 172.101: Reportable quantity of ferrous sulfate is 1,000 lbs.

California Proposition 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects or any other reproductive harm.

HMIS rating: Health 2; Flammability 0; Physical 0

NFPA Rating: Health 2; Fire 0; Reactivity 0

WGK 0

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 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 Monera Technologies Corporation, Technical Department.