



SAFETY DATA SHEET

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

SECTION 1 IDENTIFICATION

Product Name	MICROCAT®-XRCP Oil Spill Absorber/Degrader
Identified uses	Used on spillage of fuels, oils and other forms of contamination by petroleum hydrocarbons and related wastes.
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
Skin Irritant	2	H315
Eye irritant	2A	H319
Specific Target Organ Toxicity - Repeated	2	H373

Hazard pictograms



Signal words

Warning

Hazard statements

Causes skin irritation (H315)

Causes serious eye irritation (H319)

May cause damage to organs through prolonged or repeated exposure (H373)

Precautionary statements

P260 – Do not breathe dust.

P264 – Wash thoroughly after handling;

P280 – Wear protective gloves, eye, and face protection;

P302 + P352 – IF ON SKIN: Wash with plenty of soap and water;

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing;

P332 + P313 – If skin irritation occurs: get medical attention/advice;

P337 + P313 – If eye irritation persists: Get medical attention/advice;

P362 + P364 – Take off contaminated clothing and wash before reuse

P314 – Get medical advice if you feel unwell.

P501 – Dispose of contents/container in accordance with local, state, and Federal regulations.

Further information

Persons who have a compromised immune system or a history of severe allergic reactions/response should avoid contact with open wounds and/ or breathing dust or mist from product handling or manufacturing process.

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

Other hazards

Will become slippery when wet.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Identity

Common name

Synonyms

Naturally absorbent with naturally occurring non-pathogenic microbes and nutrients for oil cleanup and biodegradation.

Hazardous Components

Chemical Name (Concentration)

CAS-No

Dolomite (5%)

16389-88-1

Activated Carbon (< 5%)

7740-44-0

Protease (<1%)

9014-01-1

Amylase (<1%)

9000-90-2

Quartz (0 – 6%)	14808-60-7
Cristobalite (0 - 1%)	14464-46-1
Crystalline silica (< 0.1%)	14808-60-7

Non-Hazardous Components

Name	CAS-No
Wheat bran	116469-86-4
Corn gluten	66071-96-3
Sodium montmorillonite	132-78-9
Diatomaceous earth	91053-39-3
Peat	

SECTION 4 FIRST-AID MEASURES

Eye	Dust may cause eye irritation or redness. If exposure occurs, flush with water for 15 minutes. Hold back eyelids during flushing. Seek Medical Attention.
Skin	Dust may cause skin irritation. Flush contact areas with water.
Inhalation	Dust may cause irritation to nose, throat and lungs. Prolonged inhalation of powder may result in silicosis, a non-cancerous lung disease. If overcome by dust, remove to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Seek Medical Attention.
Ingestion	Do not induce vomiting. Drink two glasses of water and seek medical attention.
Most important symptoms/effects, acute and delayed	
Further information	

SECTION 5 FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, CO ₂ , chemical foam or water fog. Use media appropriate to surrounding materials. This product does not support combustion.
Specific hazards arising from the chemical	Material will become slippery if wet. Peat may serve as a wick with liquid flammable hydrocarbons.
Special protective actions for fire-fighters	Wear full protective equipment including self-contained breathing apparatus. Keep containers cool with water spray.

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	
Methods and materials for containment and cleaning up	Sweep up material using good housekeeping practices. Hold for disposal or reuse. Dispose to landfill or other disposal according to applicable Federal, State, and Local regulations.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling	Adequately ventilate when handling this product.
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)
Dolomite	16389-88-1	10 mg/m ³	5 mg/m ³
Crystalline silica	14808-60-7	0.1 mg/m ³	0.1 mg/m ³
Quartz	14808-60-7		1 to 5* mg/m ³
Cristobalite	14464-46-1		
Activated carbon	7440-44-0		
Protease	9014-01-1	0.00006 mg/m ³ (as pure protease)	
Amylase	9000-90-2	None established	
Wheat bran	116469-86-4	10 mg/m ³ (nuisance dust)	
Corn gluten	66071-96-3	10 mg/m ³ (nuisance dust)	
Diatomaceous earth	91053-39-3	10 mg/m ³ (nuisance dust)	
Sodium montmorillonite	1302-78-9		

* 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

This product may contain low concentrations of crystalline silica in the forms of quartz, cristobalite, and/or tridymite. The PEL for crystalline silica respirable dust is 10 mg/ m³/ (%SiO₂ + 2) if present as quartz. The comparable PEL for total dust is 30 mg/ m³/ (%SiO₂ + 2). Use half the calculated value if cristobalite or tridymite is detected.

Personal Safety Equipment

Eye Protection	Safety goggles recommended.
Skin Protection	Gloves are optional but recommended. Exposed clothing should be washed before reuse.
Respiratory protection	NIOSH or MSA approved mechanical filter respirator should be used when dust levels exceed OSHA PEL.
Industrial Hygiene	Eyewash station should be available.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light tan/brown or grayish brown fine powder
Odour	No significant odor
Odour threshold	Information not available
pH	8 – 9.9 (6% slurry)
Melting point /Freezing Point	Information not available
Initial Boiling point and boiling point range	Does Not Apply
Flash Point	Information not available
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	40 - 60 lbs/ft ³
Solubility (ies)	Insoluble in water
Partition coefficient: n-octanol/water	Does Not Apply
Auto-ignition temperature	Does Not Apply
Decomposition temperature	Information not available
Viscosity	Does Not Apply
Other Physical/Chemical Properties	Specific Gravity at 25°C – 1.7

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)
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 cause skin irritation.
Serious Eye Damage/Irritation	May cause eye irritation or redness.
Respiratory or Skin Sensitization	May cause irritation to nose, throat and lungs. Prolonged inhalation of powder may result in silicosis, a non-cancerous lung disease.
Ingestion	Information not available
Germ Cell Mutagenicity	Information not available
Carcinogenicity	Crystalline silica probably carcinogenic NTP: no IARC Monographs: no OSHA Regulated: no 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). This product contains crystalline silica which is considered a health hazard by inhalation. IARC reviewed the literature (Oct., 1996) for polymorphs of crystalline silica and determined that: There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the forms of quartz and cristobalite from occupational sources. There is inadequate evidence in humans for the carcinogenicity of amorphous silica. There is sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite. There is limited evidence in experimental animals for the carcinogenicity of tridymite. There is inadequate evidence in experimental animals for the carcinogenicity of diatomaceous earth. There is inadequate evidence in experimental animals for the carcinogenicity of synthetic amorphous silica.

	Overall evaluation: Inhaled crystalline silica in the form of quartz and cristobalite from occupational sources is carcinogenic to humans (Group 1).
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). Inhalation of dust may cause respiratory allergy in susceptible individuals.

SECTION 12 ECOLOGICAL INFORMATION

Toxicity	No ecological effects anticipated from disposal or dispersal in the environment.
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 in accordance with current Federal, State, and Local regulations.
Containers	Disposal method will be dictated by absorbed material.

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.

SECTION 15 REGULATORY INFORMATION

None of the components present in this product are at a level that requires identification under: 1) CERCLA, 2) SARA Title III, 3) 40 CFR 372 (for SARA), or 4) TSCA

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

Quartz is on Canadian WHMIS (Workplace Hazardous Material Information System) Ingredient Disclosure System, Massachusetts Substance List, New Jersey Right to Know Hazardous Substance List, and Pennsylvania Hazardous Substance List
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

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.