



SAFETY DATA SHEET

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

SECTION 1 IDENTIFICATION

Product Name	MICROCAT®-XRC Oil Spill Absorber/Degrader
Identified uses	Used on spillage of oil 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.

Other hazards

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 (<45%) 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 (< 0.4%) 14808-60-7

Non-Hazardous Components

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

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	Use media appropriate to surrounding materials. This product does not support combustion.
Specific hazards arising from the chemical	Material will become slippery if wet.
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	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.

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

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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

BASIC PHYSICAL AND CHEMICAL PROPERTIES	
Appearance	Light tan/brown/grayish-brown fine powder
Odour	No significant odor
Odour threshold	Information not available
pH	8 – 11 (6% slurry)
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	53 – 70 lbs/ft ³
Solubility (ies)	Insoluble 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	Specific Gravity at 25°C – 2.7

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 This product contains crystalline silica that is considered a health hazard by inhalation. IARC reviewed the literature (Oct. 1996) for polymorphs of crystalline silica and determined that: 1) There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the forms of quartz and cristobalite from occupational sources. 2) There is inadequate evidence in humans for the carcinogenicity of amorphous silica. 3) There is sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite. 4) There is limited evidence in experimental animals for the carcinogenicity of tridymite. 5) There is inadequate evidence in experimental animals for the carcinogenicity of diatomaceous earth. 6) There is inadequate evidence in experimental animals for the carcinogenicity of sythetic 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	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/ m ³ / (%SiO ₂ + 2) if present as quartz. The comparable PEL for total dust is 30 mg/ m ³ / (%SiO ₂ + 2). Use half the calculated value if cristobalite or tridymite is detected.

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 all wastes in accordance with all Federal, state and local agencies.
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

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.