



SAFETY DATA SHEET

Section 1 - Chemical Product and Company Information

Product Name: Ultra-Microbes

Recommend Use(s): Bioremediation of hydrocarbons

Emergency 24-hour Phone (English): CHEMTREC Number +(800) 424-9300

Company Information: UltraTech International, Inc.
11542 Davis Creek Court
Jacksonville, Florida 32256 USA

e-mail: info@spillcontainment.com
Web: www.spillcontainment.com
Telephone: 800.353.1611 • 904.292.1611 (M-W; 8:00 a.m. - 5:00 p.m. EDT)
Fax: 904.292.1325

Section 2 - Hazards Identification

This product contains less than 0.25% respirable crystalline silica according to a modified version of the NIOSH 7500 method. It does not meet the criteria for classification as hazardous according to criteria set forth by OSHA Hazard Communication Standard (29 CFR 1910.1200) or EC Regulation 1272/2008.

The microbes are considered Class 1 and have not been connected to any safety issues.

Physical Hazards: Can be slippery when wet

Health Hazards: Not classified

Environmental Hazards: Wash thoroughly with soap and water immediately. Remove all contaminated clothing immediately. Seek medical advice if irritation persists.

OSHA defined Hazards: Seek medical advice. The decision to induce vomiting or not must be made by a physician after careful consideration of all materials ingested. Risk of aspiration into lungs.

Label Elements: Hazard Symbol: None
Signal word: N/A
Hazard statement: N/A
Prevention: N/A
Response: N/A
Storage: N/A
Disposal: In accordance with local regulations (if any)

Hazards not otherwise classified: None known.

Supplemental Info: None



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Section 3 - Composition/Information on Ingredients

Substances

Chemical Name	CAS number	%
Bentonite	1302-78-9	≥95
Quartz	14808-60-7	<5

Mixed microbe population: N/A

Bentonite is a UVCB substance sub-type 4. The purity of the product is 100 % w/w. Bentonite is composed mainly of smectite group minerals but the composition is varied, as expected for a UVCB substance, and other mineral constituents will be present in small and varying amounts. These minor constituents are not relevant for classification and labelling.

Section 4 - First Aid Measures

Inhalation: No specific first aid measures. Move to fresh air.
Eye Contact: No specific first aid measures. Can be irritating. Flush thoroughly with water.
Skin Contact: No specific first aid measures. Can be drying. Wash with soap and water.
Ingestion: No specific first aid measures. Rinse mouth thoroughly.

Most important symptoms/effects, acute and delayed

Dust in the eyes can cause irritation

Indication of immediate medical attention and special treatment needed: None needed

General Information: Just provide generally supportive measures and treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable extinguishing media: Use any media suitable for the surrounding fires.

Unsuitable extinguishing media: Not applicable, non-combustible

Specific hazards arising from the chemical: None known. The product itself does not burn

Special protective equipment and precautions for firefighters: None known

Fire-fighting equipment/instructions Can be slippery when wet.

General fire hazards: This material will not burn.

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Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product

Methods and materials for containment and cleaning up:

Avoid the generation of dusts during clean-up. Collect powder using vacuum cleaner with particle filter or carefully sweep into closed container. If required, the microbes can be destroyed with the use of household bleach.

Environmental precautions: No special environmental precautions required.

Section 7 - Handling & Storage

Precautions for safe handling: Keep formation of airborne dusts to a minimum. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities: Store in a dry area. Keep the container dry. No special restrictions on storage with other products

Section 8 - Exposure Controls/Personal Protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Constituents	Type	Value	Form
INERT/NUISANCE DUST (CAS SEQ250)	PEL	5mg/m ³	Respirable
		15mg/m ³ Total dust	

US. OSHA Table Z-3 Limits for Air Contaminants (29 CFR 1910.1000)

Constituents	Type	Value	Form
INERT/NUISANCE DUST (CAS SEQ250)	TWA	5mg/m ³	Respirable
		15mg/m ³ Total dust	

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Constituents	Type	Value	Form
		50 millions of particle	Total dust
		15 millions of particle	Respirable

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Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the OEL, suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear dust-resistant safety goggles where there is danger of eye contact.

Hand protection: No protection is ordinarily required under normal conditions of use. Gloves can be worn.

Other: No special protective equipment required. Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection: Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

Thermal hazards: Not applicable.

General hygiene considerations: Use good industrial/biological hygiene practices in handling this material.

Section 9 - Physical & Chemical Properties

Appearance: Fine powder.

Physical state: Solid

Color: Light grey

Odor: Slight oil smell Odor threshold: N/A

pH: 8.5

Melting point: >842°F (>450°C)

Freezing point: N/A

Initial boiling point/range: N/A

Flash point: N/A

Evaporation rate: N/A

Flammability (solid gas): This product is not flammable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%): N/A

Flammability limit - upper (%): N/A

Explosive limit - lower (%): N/A

Explosive limit - upper (%): N/A

Vapor pressure: N/A

Vapor density: N/A

Relative density: 2.6 g/cm³

Solubility(ies)

Solubility (water): < 0.9 mg/l

Partition coefficient: N/A

(n-octanol/water): Not applicable.

Auto-ignition temperature: N/A. Decomposition temperature: > 932 °F (> 500 °C) Viscosity: N/A

Viscosity temperature: N/A



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Other Information

Bulk density: 0.9 - 1.4 g/cm³
Explosive limit: N/A
Explosive properties: Not explosive
Explosivity: N/A
Flame extension: N/A
Flammability: N/A
Flammability(flashback): N/A.
Flammability (Heat of combustion): N/A
Flammability (Train fire): N/A
Flammability class: N/A
Flash point class : Not flammable
Molecular formula: UVCB Substance
Molecular weight: N/A
Oxidizing properties: None.
Percent volatile: 0 %
pH in aqueous solution: 8.5
Specific gravity: N/A
VOC (Weight %): 0 %

Section 10 - Stability & Reactivity

Reactivity: N/A
Chemical stability: Stable at normal conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to avoid: Moisture.
Incompatible materials: None known.
Hazardous decomposition products: None.

Section 11 - Toxicological Information

Information on likely routes of exposure Ingestion: Not classified.
Inhalation: Not classified. Inhalation of dusts may cause respiratory irritation.
Skin contact: Not classified. Could be drying.
Eye contact: Not classified. Dust in the eyes will cause irritation.
Symptoms related to the physical, chemical and toxicological characteristics: None known.

Information on toxicological effects

Acute toxicity: Not classified.

	<u>Species</u>	<u>Test Results</u>
Acute Inhalation LC50	Rat	>5.27 mg/l, 4 hr OECD 436
Oral LD50	Rat	>2000 mg/kg OECD 425



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Skin corrosion/irritation: Not classified.

Serious eye damage/eye irritation: Mild irritant to eyes (according to the modified Kay & Calandra criteria)

Respiratory sensitization: Not classified.

Skin sensitization: Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: No carcinogenicity data available for this product. Sepiolite was evaluated by IARC as class 3 ("Cannot be classified as to carcinogenicity to humans"). Based on read-across with sepiolite, bentonite was assessed as non-carcinogenic. Therefore classification of bentonite for carcinogenicity is not warranted.

Reproductive toxicity: Not classified.

Specific target organ toxicity - single exposure: Not classified.

Specific target organ toxicity - repeated exposure: Not classified.

Aspiration hazard : Not available.

12-15 NOT MANDATORY

Section 16 - Other Information

Issue date: March 16, 2015 Version #01

Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

National Fire Protection Association (NFPA)

Health- 0

Flammability- 0

Instability- 0

Special- None

UVCB: A substance of Unknown or Variable composition, Complex reaction products or Biological materials.

The information this safety data sheet is believed to be accurate and is the best information available to UltraTech International, Inc. This document is intended only as a guide to the appropriate precautions to handling a chemical by a person trained in chemical handling. UltraTech International makes no warranty of merchantability and any other warranty, express or implied with respect to such information or the product to which it relates, and we assume no liability resulting from the use, misuse or handling of the product to which the safety data sheet relates. Users and handlers of this product should make their own investigations to determine the suitability of the information provided herein for their own purposes.