



SAFETY DATA SHEET

1. IDENTIFICATION

Product name: BugMan's Shur Step Concrete Cleaner

Other means of identification: None

Recommended use: Bioremediation of hydrocarbons

Recommended restrictions: None known

Manufacturer

Company Name: Agricultural Services Inc.

Address: PO Box 1270
Nash, TX 75569

Telephone: 903-831-7280

Website: www.asicompanies.com

Emergency phone: 903-832-4790

2. HAZARDS IDENTIFICATION

An enzymatic mixture of active, hydrocarbon-oxidizing, natural, single-celled organisms. The enzymes and cells are contained in an inert preparation of natural clay. The mixture has no chemical impact. 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: Not classified

OSHA defined hazards: Not classified

Label elements:

Hazard symbol: None

Signal word: N/A

Hazard Statement: N/A

Prevention: N/A

Response: N/A

Storage: Keep dry

Disposal: In accordance with local regulations (if any)

Hazard(s) not otherwise classified: None known

Supplemental information: None

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

4. FIRST-AID MEASURES

Inhalation: No specific first aid measures. Move to fresh air

Skin contact: No specific first aid measures. Can be drying to skin. Wash with soap and water

Eye contact: No specific first aid measures. Can be irritating. Flush thoroughly with 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

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

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 cleanup. Collect powder using vacuum cleaner with particle filter or carefully sweep into container. If required, the microbes can be destroyed with the use of household bleach.

Environmental precautions: No special environmental precautions required

7. HANDLING AND 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.

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	5 mg/m ³	Respirable
		15 mg/m ³	Total Dust

US OSHA Table Z-3 Limits for Air Contaminants (29 CFR 1019.1000)

Constituents	Type	Value	Form
Inert/Nuisance Dust (CAS SEQ250)	TWA	5 mg/m ³	Respirable
		15 mg/m ³	Total Dust

Occupational exposure limits

US OSHA Table Z-3 Limits for Air Contaminants (29 CFR 1019.1000)

Constituents	Type	Value	Form
		50 ppm	Total Dust
		15 ppm	Respirable

US ACGIH Threshold Limit Values

Constituents	Type	Value	Form
Inert/Nuisance Dust (CAS SEQ250)	TWA	3 mg/m ³	Respirable particles
		15 mg/m ³	Inhalable particles

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 (OEL).

Thermal hazards: Not applicable.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Fine powder.

Physical state: Solid

Color: Light grey

Odor: Slight oil smell. Odor threshold: Not applicable.

pH: 8.5

Melting point: >842°F (>450°C)

Freezing point: Not applicable.

Initial boiling point/range: Not applicable.

Flash point: Not applicable.

Evaporation rate: Not applicable.

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

Upper/lower flammability or explosive limits
Flammability limit – lower (%): Not applicable.
Flammability limit – upper (%): Not applicable.
Explosive limit – lower (%): Not available.
Explosive limit – upper (%): Not available.

Vapor pressure: Not applicable.

Vapor density: Not applicable.

Relative density: 2.6 g/cm³

Solubility(ies)

Solubility (water): <0.9 mg/L

Partition coefficient: Not applicable.

(n-octanol/water): Not applicable.

Auto-ignition temperature: Not applicable.

Decomposition temperature: >932°F (>500°C)

Viscosity: Not applicable.

Viscosity temperature: Not applicable.

Other information:

Bulk density: 0.9 – 1.4 g/cm³

Explosive limit: Not applicable.

Explosive properties: Not explosive.

Explosivity: Not applicable.

Flame extension: Not applicable.

Flammability: Not applicable.

Flammability (flashback): Not applicable.

Flammability (Heat of combustion): Not applicable.

Flammability (Train fire): Not applicable.

Flammability class: Not applicable.

Flash point class: Not flammable.

Molecular formula: UVCB Substance.

Molecular weight: Not applicable.

Oxidizing properties: None.

Percent volatile: 0%

pH in aqueous solution: 8.5 s.u.

Specific gravity: Not applicable.

VOC (Weight %): 0%

10. STABILITY AND REACTIVITY

Reactivity: Not available.

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.

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.

	Species	Test Results
Acute		
Inhalation		
LC50	Rat	>5.27 mg/L, 4 hrOECD 436
Oral		
LD50	Rat	>2000 mg/kg OECD 425

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

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Issue date 30-May-2015 Version # 00

Further information

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

NFPA ratings

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

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