

1. IDENTIFICATION

Manufacturer

Company name: Oppenheimer Biotechnology Inc.

Address: PO Box 1490
Pflugerville TX 78660

Telephone: 512-474-1016

Website: obio.com

Email: obiotech@obio.com

Emergency phone: 512-751-2121

Product Name: Piranha

Recommended use: Bioremediation of hydrocarbons

Recommended restrictions: None known

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.

Sodium Nitrate- contact with combustible material will not cause spontaneous ignition. However, substance will enhance an existing fire. (Class 1 Oxidizer according to NFPA)

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

NFPA Ratings: Health: 2, Fire: 1, Reactivity: 3

Ingredients:	CAS#:
Bentonite	1302-78-9
Ammonium Sulphate (nonhazardous)	7783-20-2
Sodium Nitrate	7631-99-4
Potassium Chloride	7447-40-7
Ammonium Phosphate (nonhazardous)	7722-76-1
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.

Potential health hazards:

Eye Exposure - May cause eye irritation.

Skin Absorption - May cause skin irritation.

Ingestion - Possible nausea, vomiting, diarrhea.

Inhalation - Prolonged or excessive inhalation may cause respiratory tract irritation.

Summary of Risks:

Prolonged or repeated contact with Green Shark may irritate eyes and skin. Inhalation of dust may irritate nose, throat, and lungs.

4. FIRST AID PROCEDURES

Eyes: Immediately flush with water for 15 minutes holding eyelids open. Get medical attention if irritation persists.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Have conscious person drink 1 to 2 glasses of water, then induce vomiting with caution. Call a physician.

Skin: Remove contaminated clothing. Flush affected area with water for 15 minutes. Wash with soap and water.

Inhalation: Remove person to fresh air. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water fog or spray.

Hazardous Combustion Products: Ammonia, oxides of carbon, nitrogen, and other metal oxides.

Explosion Hazards: Dusts at sufficient concentrations may form explosive mixtures with air.

Fire Fighting Procedures: Evacuate area. Flood with water to cool containers. Apply water from a safe distance to avoid splattering of molten material. Wear self-contained breathing apparatus to fight fire.

Fire Fighting Equipment: Wear self-contained breathing apparatus to fight large fires.

Flash Point: Decomposes on heating.

Comment: Contact with combustible material will not cause spontaneous ignition. However, substance will enhance an existing fire. (Class 1 Oxidizer according to NFPA)

6. ACCIDENTAL RELEASE MEASURES

General Procedures: Avoid dusting or misting condition during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose according to local, state, or federal regulations. Keep spills away from drinking water supplies. After spill, flush area with water.

7. HANDLING AND STORAGE**KEEP OUT OF REACH OF CHILDREN**

Handling: See Label. Wash hands with soap and water after handling product. Avoid container breakage. Avoid inhalation or contact with skin, eyes, or clothing. Do not contaminate water sources when disposing of equipment wash waters. Keep out of lakes, streams, or ponds.

Storage: Avoid container breakage. Store in a cool, dry area in closed container or package. Keep away from feed or foodstuffs.

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-3 Limits for Air Contaminants

(29 CFR 1910.1000)

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

US. ACGIH Threshold Limit Values

Constituents	Type	Value	Form
INERT/NUISANCE DUST (CAS SEQ250)	TWA	3mg/m ³ particles	Respirable
		15mg/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. **Engineering Controls:** Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal Protective Equipment:

Eyes and Face: Eye and face protection is not required for routine use. High airborne dust levels or mist of product dissolved in liquid may be irritating – use chemical goggles.

Skin: None required for normal use. If prolonged or repeated use irritates skin, use Nitrile rubber gloves, over 0.11 mm thickness, > 480 min breakthrough time.

Respiratory: If airborne dust levels are high or irritation occurs, use NIOSH/MSHA approved respirator for dust, mist, and fumes to reduce exposures to acceptable levels.

Other Use Precautions: Running water or eye wash station should be available in case material gets in eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Appearance: Fine powder with granules

Color: Light grey with reddish granules

Solubility in Water: Typically 80-85% for water soluble fertilizers

Density: 0.9-1.4 g/cm²

10. STABILITY AND REACTIVITY

Stable: Yes

Hazardous Polymerization: No

Conditions to Avoid: Extreme heat. Contact with fuels and other organic or combustible materials. Active metals such as aluminum and magnesium. Strong reducing agents.

Hazardous Decomposition Products: In a fire, ammonia and toxic oxides of nitrogen, carbon, potassium and sulfur may be generated.

Incompatible Materials: Strong oxidizing (permanganate, dichromate, nitrate, chlorine) and reducing agents, sodium nitrate and many chlorine compounds (including household bleach and other cleaning products). Active metals, such as aluminum and magnesium.

11. TOXICOLOGICAL INFORMATION

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.
Carcinogenicity:
IRCA - No
NTP - No
OSHA - No

12-15 NOT MANDATORY

16. OTHER INFORMATION

Issue date AUG-2015 Version # 01
Further information

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

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

Manufacturer Disclaimer: The information contained herein is, to the best of the Manufacturer's (see Section 1) knowledge and belief, accurate and reliable. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Manufacturer shall not be liable for any damage or injury resulting from abnormal use, failure to adhere to recommended practices or from any hazards inherent in the nature of the product. This document does not replace the precautionary language, use directions, or the storage and disposal information found on the label.