

# Material Safety Data Sheet

## Augmedium™

Catalog Number: 0123, 0124



Athena Enzyme Systems™

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## 1 - Product and Company Information

**Product Name:** Augmedium™  
**Catalog Number:** 0123, 0124  
**Product Description:** Medium additive that increases the level of expression and fraction of soluble protein.  
**Manufacturer/Supplier:** Athena Environmental Sciences, Inc.  
**Information Department:** Technical Services  
**Emergency Phone:** 410-455-6319

## 2 - Composition / Data on Components

**CAS No. Description:** Not Applicable

## 3 - Hazard Identification

### Hazard Description:

This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.

### NFPA Ratings (Scale: 0 - 4)

Health = 2  
Fire = 1  
Reactivity = 1

## 4 - First Aid Measures

**General Information:** No special measures required.

### After inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

### After skin contact:

Immediately wash with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

### After eye contact:

Rinse opened eye with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating eyelids with fingers. Call a physician.

### After swallowing:

Wash out mouth with water provided person is conscious. Call a physician.

**Information for doctor:** Show this label.

## 5 - Fire Fighting Measures

### Suitable extinguishing agents:

CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water or alcohol resistant foam.

### Protective equipment:

No special measures required.

## 6 - Accidental Release Measures

### Person-related safety precautions:

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Keep unprotected persons away.

### Measures for environmental protection:

Sweep up, place in a bag and hold for waste disposal

### Measures for cleaning/collecting:

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

**Additional information:** No dangerous substances are released.

## 7 - Handling and Storage

### Handling:

**Information for safe handling:** Do not breathe dust. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure.

### Information about protection against explosions and fires:

No special measures required.

### Storage:

#### Requirements to be met by storerooms and receptacles:

Store under inert gas. Moisture sensitive.

#### Information about storage in one common storage facility:

Store under inert gas. Moisture sensitive.

**Further information about storage conditions:** None.

## 8 - Exposure Controls and Personal Protection

### Additional information about the design of technical systems:

Mechanical exhaust required. Safety shower and eye bath.

### Components with limit values that require monitoring at the workplace:

Not required.

### Additional information:

The lists that were valid during the creation were used as basis.

### Personal Protective Equipment:

General protective and hygienic measures:

Wash thoroughly after handling.

Breathing equipment:

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to technical systems. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Protection of hands: Rubber or latex gloves.

Eye protection: Safety goggles.

Body protection: Protective work clothing (lab coat).

**9 - Physical and Chemical Properties**

Form: Powder

Color: White

Odor: Unpleasant

**Change in condition:**

Melting point/ Melting range: 40.0 – 44.0 ° C

Boiling point/ Boiling range: Not determined.

Flash point: 235°F / 113°C

Flammability (solid, gaseous): Product is not flammable.

Danger of explosion: Product does not present an explosion hazard.

Density: Not determined

Solubility in /Miscibility with: Soluble at 0.1M, 20°C

**10 - Stability and Reactivity****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications/avoid bases, oxidizing agents, reducing agents, alkali materials.

**Dangerous reactions:**

May decompose on exposure to moist air or water.

**Dangerous products of decomposition:**

Carbon monoxide, carbon dioxide, sulfur dioxides, hydrogen sulfide gas

**11 - Toxicological Information****Acute toxicity:****Primary irritant effect:**

On the skin: Causes skin irritation

On the eye: Causes eye irritation

**Skin Absorption:**

May be harmful if absorbed through the skin.

**Additional toxicological information:**

May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract. Harmful if swallowed.

**Classification:**

The substance is not subject to classification.

**Target Organs:**

Central nervous system.

**Signs and Symptoms of Exposure:**

Nausea, headache and vomiting. CNS depression.

**Toxicity Data:**

Oral, Rat, LD50- 400 mg/kg

Intraperitoneal, Mouse, LD50- 154 mg/kg

Intramuscular, Mouse, LD50- 108 mg/kg

Behavioral: Convulsions or effect on seizure threshold.

**12 - Ecological Information****Ecological effects:****Other information:**

The ecological effects have not been thoroughly investigated.

**General Notes:**

Generally not hazardous for water if well diluted.

**13 - Disposal Considerations****Product:****Recommendation:** Must adhere to state and federal regulations.

Disposal must be made according to the regulations found in 40 CFR 261. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Uncleaned packagings:****Recommendation:**

Disposal must be made according to state and federal regulations.

**Recommended cleansing agent:** Water.**14 - Transportation Information****DOT regulations:** - This substance is considered to be non-hazardous for transport.**Hazard Class:****Land transport ADR/RID (cross-border):****ADR/RID Class:****Maritime transport IMDG:** -**IMDG Class:****Marine pollutant:****Air transport ICAO-TI and IATA-DGR:** Non-hazardous for air transport.**ICAO/IATA Class:****15 - Regulatory Information****Product related hazard information:**

Symbol of danger: Xn

Indication of danger: Harmful

R 22-36/37/38

Risk statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.

S 26-36

Safety statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**National regulations:**

Indication of Danger: Toxic (USA) Harmful (EU)

Risk statements: Harmful if swallowed. Irritating to eyes, respiratory system and skin.

Safety statements: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

US statements: Unpleasant odor Target organ(s): Central nervous system

Additional classification according to Decree on Hazardous Materials:

CERCLA: This product does not contain chemicals having a Reportable Quantity (RQ).

SARA 311/312: No.

313: Not subject to reporting.

TSCA: Yes.

**16 - Other Information**

To the best of our knowledge, the information contained herein is accurate. However, neither Athena Environmental Sciences, Inc. nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Department Issuing MSDS: Office of the CSO

Contact: Technical Service Representative