DATE OF LAST REVISION: 06/16/15

Section 1: Identification

Product Name: Barium Ferrite

CAS Number: 12047-11-9 / EC Number: 234-974-5

Company: Angstrom Sciences, Inc.

40 South Linden Street
Duquesne, PA 15110
For more information call: 412-469-8466

(Monday - Friday 9:00 AM -5:00 PM EST)

Section 2: HAZARD IDENTIFICATION

Signal Word: Warning



Hazard Statements: H302 + H332: Harmful if swallowed or inhaled

Precautionary Statements: P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P264: Wash thoroughly after handling

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in

a position comfortable for breathing.

P302+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician

if you feel unwell.

P501: dispose of contents/container in accordance with

local/regional/international regulations.

HMIS Health Ratings (0-4):

Health: 2
Flammability: 0
Physical: 1

Section 3: Composition/Information on Ingredients

Chemical characterization: Ceramic

Additional Names: Barium iron oxide, Barium dodecairon nonadecaoxide

CAS# Description: 12047-11-9

Percentage: 100 wt% EC number: 234-974-5

Section 4: FIRST AID MEASURES

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None
Important Symptoms: None

Eye Contact: Flush eyes with water, blinking often for several minutes. Remove contact lenses if

present and easy to do. Continue rinsing.

Skin Contact: Wash affected area with mild soap and water. Remove any contaminated clothing. **Inhalation:**Remove to fresh air. If required, give artificial respiration. Seek medical advice.

Indestion: Seek medical attention

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: No special restrictions - use suitable extinguishing agent for surrounding material and type of fire.

Flammability: Non-Flammable

Special Fire Fighting Procedure: Use full-face, self contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.

Environmental Precautions: Isolate runoff to prevent environmental pollution.

Section 7: HANDLING AND STORAGE

Handling Precautions for safe handling: Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in Section 10.

Work/Hygienic Maintenance: Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.

Ventilation: Provide sufficient ventilation to maintain concentration at or below threshold limit.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible Exposure Limits: 0.5 mg/M³ as Ba. ;long-term value **Threshold Limit Value:** 0.5 mg/m³as Ba, long-term value

Special Equipment: None

Respiratory Protection: Dust Respirator

Protective Gloves: Rubber Gloves

Eye Protection: Safety glasses or goggles

Body Protection: Protective work clothing. Wear close-toed shoes and long sleeves/pants.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form: Powder, Granules, Pellets, Sputtering target, Custom parts

Color: Black
Odor: Odorless
Water Solubility: Insoluble
Boiling Point: N/A
Melting Point: > 1315°C
Flash Point: N/A
Autoignition Temperature: N/A

Molecular Weight: 1111.448 g/mol

Section 10: STABILITY AND REACTIVITY

Density:

Reactivity: Oxidizing agents

N/A

Chemical Stability: Stable under recommended storage conditions

Incompatible Conditions: None

Hazardous Decomposition Products: Metal oxide fume. Carbon monoxide, Carbon dioxide,

Barium Oxide

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:
Eyes: May cause irritation
Skin: May cause irritation

Ingestion: Harmful Inhalation: Harmful

Chronic: Barium compounds may cause severe gastroenteritis, including abdominal pain, vomiting and diarrhea, tremors, faintness, paralysis of the arms and legs, and slow or irregular heartbeat. Severe cases may produce collapse and death due to respiratory failure, soluble barium compounds and more likely to cause the effects than insoluble compounds. Inhalation of fumes may cause sore throat, coughing, labored breathing, and irritation of the respiratory tract as well as the above symptoms.

Signs & Symptoms: N/A
Aggravated Medical Conditions: N/A
Median Lethal Dose: N/A
Carcinogen: N/A

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: Low

Persistence Bioaccumulation Toxicity: No Very Persistent, Very Bioaccumulative: No

Notes: N/A

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with local, state, national, and international regulations

Section 14: TRANSPORT INFORMATION



Hazard Class: 6.1 Toxic substances

Packing Group: UN1564

UN Number:

Proper Shipping Name: Barium compounds, n.o.s. (Barium Ferrite)

Section 15: REGULATORY INFORMATION Sec 302 Extremely Hazardous: No

Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: Yes

Section 16: OTHER INFORMATION

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.