DATE OF LAST REVISION: 07/13/15

Section 1: Identification

Product Name: Zinc Sulfide

CAS Number: 1314-98-3 / EC Number: 215-251-3

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: None

Hazard Statements: H303: May be harmful if swallowed

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

HMIS Health Ratings (0-4):

Health: 1
Flammability: 0
Physical: 1

Section 3: Composition/Information on Ingredients

Chemical characterization: Salt

Additional Names: Zincblende, Wurtzite, Zinc sulphide

CAS# Description: 1314-98-3

Percentage: 100 wt% EC number: 215-251-3

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.

Ingestion: 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: None
Threshold Limit Value: None
Special Equipment: None

Respiratory Protection: Use a respirator with type N95 (USA) or PE (EN 143) cartridges as

a backup to engineering controls. Risk assessment should be

performed to determine if purifying respirators are appropriate. Only use equipment tested and approved under appropriate government

standards.

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: White

Odor: Odorless
Water Solubility: O.0069 g/l

Boiling Point: 1,185°C (sublimes)

 Melting Point:
 1975°C

 Flash Point:
 N/A

 Density:
 4.09 g/cc

 Molecular Weight:
 97.474 g/mol

Section 10: STABILITY AND REACTIVITY

Reactivity: Oxidizing agents, acids

Chemical Stability: Stable under recommended storage conditions

Incompatible Conditions: None

Hazardous Decomposition Products: Metal Oxide Fume, SO_x

Section 11: TOXICOLOGICAL INFORMATION

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

Ingestion: Contact with acids liberates toxic gas

Inhalation: May cause irritation

Chronic: Zinc-containing fumes may cause metal fume fever. Sulfides may cause irritation to skin, corrosive by ingestion. Hydrogen sulfide, if generated, is toxic, a severe irritant and flammable. Effects include conjunctivitis, headache, nausea, dizziness, coughing, pulmonary edema and leading to death.

EPA-II: Inadequate information to access carcinogenic potential.

Signs & Symptoms: N/A Aggravated Medical Conditions: N/A

Median Lethal Dose: >2000 mg/kg for rat by mouth or skin

Carcinogen:

EPA-D: Not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available.

EPA-I: Data are inadequate for an assessment of human carcinogenic potential.

EPA-II: Inadequate information to access carcinogenic potential.

Section 12: ECOLOGICAL INFORMATION

Eccological effects: Danger to drinking water, even in small doses. Poisonous to fish and aquatic life.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

Hazardous: Not hazardous for transportation

Hazard Class: N/A
Packing Group: N/A
UN Number: N/A
Proper Shipping Name: N/A

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.