COPPER OXIDE

SAFETY DATA SHEET

DATE OF LAST REVISION: 0 6/25/15

Section 1: Identification

Product Name: Copper Oxide
CAS Number: 1317-39-1 / **EC Number:** 215-270-7
Company: Angstrom Sciences, Inc.
40 South Linden Street
Duquesne, PA 15110
For more information call: 412-469-8466
(Monday - Friday 9:00 - 5:00 EST)

Section 2: HAZARD IDENTIFICATION

Signal Word: Warning

Hazard Statements: H302 Harmful if swallowed

Precautionary Statements:
P264 Wash thoroughly after handling
P270 Do not eat, drink or smoke when using this product.
P301 + P312 IF SWALLOWED: Call a Poison Center or doctor/physician if you feel unwell.
P330 Rinse mouth
P501 Dispose of contents/container in accordance with local/regional/national/ international regulations

HMIS Health Ratings (scale 0-4)

Health	2
Flammability	0
Physical	1

Section 3: Composition

Chemical characterization: Ceramic

CAS# Description: 1317-39-1

Percentage: 100 wt%

EC number: 215-270-7

Section 4: FIRST AID MEASURES

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.

Inhalation: Remove victim to fresh air. If unconscious, place patient stably in side position for transportation.

Ingestion: Seek medical treatment.

General Treatment: Seek medical attention if symptoms persist.

Special Treatment: None

Important Symptoms: None

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing Media: Do not use water for metal fires - use CO_2, sand, extinguishing powder

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 are 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: N/A

Threshold Limit Value:	N/A
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:	Butyl Rubber Gloves, BR
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

Appearance:

Form:	Powder
Color:	Dark red to purple
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	1800°C
Melting Point:	1235°C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	6.00 g/cc
Molecular Weight:	143.09 g/mol

Section 10: STABILITY AND REACTIVITY

Reactivity:	Oxidizing agents
Chemical Stability:	Stable under recommended storage conditions
Incompatible Conditions:	Air, Water/moisture
Hazardous Decomposition Products:	Metal oxide fume

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: May cause irritation

Skin: May cause irritation

Ingestion: May cause irritation

Inhalation: May cause irritation

Chronic: The Resgistry of Toxic Effects of Chemical Substances (RTECS) contains multiple dose toxicity data for this substance.

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

Median Lethal Dose: 470 mg/kg for rat by mouth
Carcinogen: EPA-D: Not classifiable as to human carcinogenicity: inadequate human and animal evidence of carcinogenicity or no data are available

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: High

Persistence Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

Notes: Very toxic for aquatic organism. May cause long lasting harmful effect on aquatic life. Do not allow material to be released to the environment without proper governmental permits. Do not allow product to reach any water sources. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Avoid transfer into the environment.

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

Hazardous: Hazardous for transportation

Hazard Class: 9 Miscellaneous dangerous substances and articles
Packing Group: III
UN Number: UN3077
Proper Shipping Name: Environmentally hazardous substances, solid, n.o.s. (Copper oxide)

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.