

NICKEL SILICIDE
SAFETY DATA SHEET
DATE OF LAST REVISION: 07/13/15

Section 1: Identification

Product Name: Nickel Silicide
CAS Number: 12201-89-7 / **EC Number:** NIL
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: Danger



Hazard Statements: H317: May cause an allergic skin reaction
H350: May cause cancer
H372: Causes damage to organs through prolonged or repeated exposure

Precautionary Statements: P261: Avoid breathing dust/fume/gas/mist/vapors/spray
P280: Wear protective gloves/protective clothing/eye protection/
face protection
P263: Avoid contact during pregnancy/while nursing
P405: Store locked up
P501: Dispose of contents/container in accordance with local/regional/
national/international regulations

HMIS Health Ratings (0-4):

Health:	1
Flammability:	0
Physical:	0

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Section 3: Composition/Information on Ingredients

Chemical characterization: Ceramic

Additional Names: Nickel disicde

CAS# Description: 12201-89-7

Percentage: 100 wt%

EC number: NIL

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: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.

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.

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Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Permissible Exposure Limits:	1 mg/m ³ as Ni, Long-term value
Threshold Limit Value:	0.2 mg/m ³ as Ni, 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

Appearance:

Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Color:	Green
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular Weight:	114.88 g/mol

Section 10: STABILITY AND REACTIVITY

Reactivity:	Reacts with oxidizing agents
Chemical Stability:	Stable under recommended storage conditions
Incompatible Conditions:	None
Hazardous Decomposition Products:	Metal oxide fume, Silicon oxide

Section 11: TOXICOLOGICAL INFORMATION

Potential Health Effects:

Eyes: May cause irritation

Skin: May cause irritation

Ingestion: May cause irritation

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Inhalation: May cause irritation

Chronic: Inorganic silicon compounds may be acute inhalation irritants. Prolonged inhalation may cause pulmonary fibrosis known as silicosis. Nickel and nickel compounds may cause a form of dermatitis known as nickel itch. They may also cause intestinal disorders, convulsions and asphyxia. Airborne nickel contaminated dusts are regarded as carcinogenic to the respiratory tract.

Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity. ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans. Carcinogen as defined by OSHA. NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

Section 12: ECOLOGICAL INFORMATION

Aquatic Toxicity: Low

Persistence Bioaccumulation Toxicity: No

Very Persistent, Very Bioaccumulative: No

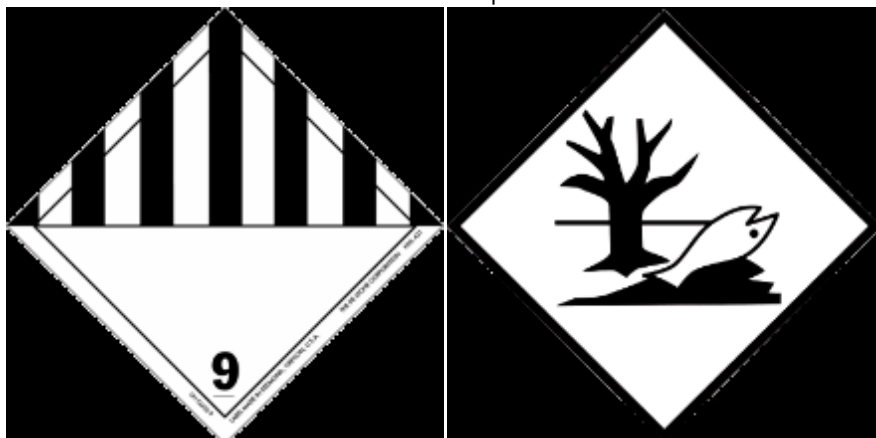
Notes: N/A

Section 13: DISPOSAL CONSIDERATIONS

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

Section 14: TRANSPORT INFORMATION

Hazardous: Hazardous for transportation



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

Section 15: REGULATORY INFORMATION

Sec 302 Extremely Hazardous: No
Sec 304 Reportable Quantities: N/A
Sec 313 Toxic Chemicals: No

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.