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### 1. Product and Company Identification

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Trade Name: Strontium nitride  
Chemical Formula:  $\text{Sr}_3\text{N}_2$   
Recommended Use: Scientific research and development

Manufacturer/Supplier: Stanford Advanced Materials  
Address: 23661 Birtcher Dr. Lake Forest,  
CA 92630 USA  
Tel #: +1 (949) 407-8904

24-Hour Emergency Contact: +1 (949) 407-8904

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### 2. Hazards Identification

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Signal Word: Warning



Hazard Statements: H315 Causes skin irritation  
H319 Causes serious eye irritation  
H335: May cause respiratory irritation

Precautionary Statements: P261 Avoid breathing dust/fume/vapor  
P264: Wash skin thoroughly after handling  
P271: Use only outdoors or in a well-ventilated area  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P302+P352: IF ON SKIN: Wash with soap and water  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P312: Call a POISON CENTER or doctor/physician if you feel unwell  
P362: Take off contaminated clothing and wash before reuse  
P403+P233: Store in a well ventilated place. Keep container tightly closed  
P405: Store locked up  
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

HMIS Health Ratings (0-4):  
Health: 2  
Flammability: 3  
Physical: 1

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### 3. Composition

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Chemical Family:	Ceramic
Additional Names:	None
Strontium nitride (Sr <sub>3</sub> N <sub>2</sub> ):	
Percentage:	100 wt%
CAS #:	12033-82-8
EC #:	NIL

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### 4. First Aid Procedures

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General Treatment:	Seek medical attention if symptoms persist.
Special Treatment:	None
Important Symptoms:	e None
Inhalation:	Remove victim to fresh air. Supply oxygen if breathing is difficult.
Ingestion:	Seek medical attention.
Skin:	Wash affected area with mild soap and water. Remove any contaminated clothing.
Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

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### 5. Firefighting Measures

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Flammability:	Non-flammable, except as powder
Extinguishing Media: Spec. Fire Fighting Procedure:	Do not use water for metal fires – use CO <sub>2</sub> , sand, extinguishing powder. Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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### 6. Accidental Release Measures

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If Material Is Released/Spilled:	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.

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### 7. Handling and Storage

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Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	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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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Use a respirator with type P100 (USA) or P3 (EN143) cartridges as a backup to engineering controls. Risk assessment should be performed to determine if air-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.

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## 9. Physical and Chemical Characteristics

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Color	Black
Form	Powder, Granules, Pellets, Sputtering target, Custom parts
:	N/A
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	1030 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	290.87 g/mol

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## 10. Reactivity

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Stability:	Stable under recommended storage conditions
Reacts With:	Ammonia, Oxidizing agents
Incompatible Conditions:	Water/moisture
Hazardous Decomposition Products:	Metal oxide fume

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## 11. Toxicological Information

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Potential Health Effects:				
Eyes	May	cause	irritation	
:	May	cause	irritation	
Ingestion:	May	cause	irritation	
Inhalation:	May	cause	irritation	
Chronic:	N/A			
Signs & Symptoms: Aggravated	N/A			
Medical Conditions:	N/A			
Median Lethal Dose:	2750 mg/kg for rat by mouth			
	1826 mg/kg for mouse by mouth			
Carcinogen:	N/A			

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## 12. Ecological Information

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Aquatic Toxicity:	Low
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A

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### 13. Disposal Considerations

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

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### 14. Transportation Data

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Hazardous: Hazardous for transportation.



Hazard Class: Packing 4.3 Substances which, in contact with water, release flammable gas  
Group: II  
UN Number: UN2813  
Proper Shipping Name: Water-reactive solid, n.o.s. (Strontium nitride)

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### 15. Regulatory Information

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

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### 16. Other Information

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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