

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Trade Name: Silicon Nitride **Chemical Family:** Nitride
Formula: Si₃N₄ **CAS #:** 12033-89-5

II HAZARDOUS INGREDIENTS

<u>%</u>	<u>PEL</u>	<u>TLV</u>
100	Not Established	Not Established

III PHYSICAL DATA

Boiling Point:	N/A	Melting Point:	1900 °C (sublimes)
Specific Gravity (H₂O = 1):	3.44	Vapor Pressure:	N/A
% Volatiles by Volume:	N/A	Solubility in H₂O:	Insoluble
Calc. Molecular Weight:	140.28	Vapor Density (Air = 1):	N/A
Appearance and Odor:	Gray powder, odorless		

IV FIRE AND EXPLOSION HAZARDS DATA

Flash Point (Method Used): N/A **Autoignition Temperature:** N/A
Flammable Limits in Air: Lower: N/A **Upper:** N/A

Extinguishing Media: Use water, carbon dioxide, dry chemical, dry chemical extinguishing agents, dry sand or dry ground dolomite.
Special Fire Fighting Procedures: No special fire-fighting procedures needed. Use normal procedures which include wearing NIOSH/MSHA approved self-contained breathing apparatus, flame and chemical resistant clothing; hats, boots and gloves. If without risk, remove material from fire area. Cool container with water from maximum distance.

Unusual Fire & Explosion Hazard: None known

V HEALTH HAZARD INFORMATION

Effects of over Exposure: Acute:

Ingestion: May be harmful, effects not known.
Skin Contact: May cause irritation.
Eye Contact: May cause irritation.
Inhalation: Dust may cause irritation to upper respiratory tract.

Medical Conditions, if any, Aggravated by the Chemical: None known.

Other Health Hazards: None known.

Chronic Effects: None known.

Carcinogenicity: NTP: No IARC: No OSHA: No EPA: No

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. Call physician immediately.

EYES: Immediately flush eyes, including under eyelids, with large amounts of water. If irritation persists seek medical attention.

SKIN: Remove contaminated clothing, flood skin with large amounts of water. If irritation persists seek medical attention.

INGESTION: No specific information available, but one should obtain medical attention.

VI REACTIVITY DATA

Stability: Stable

Conditions to Avoid: None known

Incompatibility (Material to Avoid): None known

Hazardous Decomposition Products: None known

Hazardous Polymerization: Will not occur

VII SPILL OR LEAK PROCEDURES

Steps to Be Taken in Case Material Is Released or Spilled: Wearing full protective equipment, cover spill with dry sand or vermiculite. Mix well and carefully transfer to a container.

Waste Disposal Method: Consult state, local or federal EPA regulations for proper disposal.

VIII SPECIAL PROTECTION INFORMATION

Respiratory Protection: Use a NIOSH/MSHA approved dust respirator.

Ventilation: Laboratory fume hood.

Protective Gloves: Rubber

Eye Protection: ANSI approved safety goggles.

Other Protective Equipment: Normal laboratory wear.

IX SPECIAL PRECAUTIONS

Handling and Storage: Keep container tightly closed. Store in a cool, dry, well-ventilated area. Wash thoroughly after use.

Other Precautions: Lab coat and apron, flame and chemical resistant coveralls, eyewash capable of sustained flushing, safety drench shower and hygienic facilities for washing. Caution: Dust may irritate skin and eyes.

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Dated: May 1996