



MATERIAL SAFETY DATA SHEET
COMPLIES WITH 29 CFR 1910.1200.
OSHA HAZARD COMMUNICATION RULE

DATE OF LAST REVISION: 06-21-94

CHEMICAL IDENTITY

LABEL IDENTITY	NICKEL SILICIDE
CHEMICAL NAME/SYNONYMS	METAL SILICIDE
FORMULA	Ni₂Si
CAS REGISTRY NUMBER	12201-89-7
HAZARDOUS INGREDIENTS:	
%: 0-100%	OSHA(PEL): 1mg/m3 ACGIH(TLV):: 1mg/m3

PHYSICAL AND CHEMICAL PROPERTIES

COLOR, FORM AND ODOR	Greenish-gray powder and pieces, no odor
BOILING POINT	NA
DENSITY (gm/cc)	ND
VAPOR PRESSURE @ 20°	NE
% VOLATILE BY VOLUME (%)	NE
EVAPORATION RATE (H ₂ O=1)	NA
SOLUBILITY IN WATER	Insoluble
MELTING POINT	1309.00 C
SPECIFIC GRAVITY (H ₂ O=1)	7.2 gm/cc

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	NE
AUTOIGNITION TEMPERATURE (°C)	NE
FLAMMABILITY	Non-Flammable
EXTINGUISHING MEDIA	Use suitable extinguishing media for Surrounding materials or type of fire.
SPECIAL FIRE FIGHTING PROCEDURES	Wear a full face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. Fumes from fire are hazardous. Isolate runoff to prevent environmental pollution.
UNUSUAL FIRE & EXPLOSION HAZARDS	None recorded



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HEALTH HAZARD INFORMATION

TOXICITY DATA **No Data**

HMIS RATING:

HEALTH: **na** FLAMMABILITY: **na** REACTIVITY: **na** PERSONAL PROTECTION: **na**

ROUTES OF ENTRY

INHALATION: **Yes**
SKIN: **Yes**
INGESTION: **Yes**
EYES: **Yes**

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: **Pre-existing respiratory disorders, pulmonary functions, asthma and skin disorders.**

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: **May cause irritation to the upper respiratory tract, mucous membranes and nasal cavities. May cause pulmonary asthma attacks. Prolonged or repeated inhalation may cause pneumonitis.**

DERMAL/EYE: **May cause irritation or conjunctivitis.**

INGESTION: **Nickel is poison by ingestion. Large doses may cause intestinal disorders, convulsions and asphyxia. May also cause nickel toxicity.**

CARCINOGENICITY: NTP: **Yes** IARC MONOGRAPHS: **Yes** OSHA REGULATE: **Yes**

EMERGENCY FIRST AID PROCEDURES:

INGESTION: **Give 1-2 glasses of milk or water and induce vomiting; seek medical attention immediately. Never induce vomiting or give anything by mouth to an unconscious person.**

INHALATION: **Remove victim to fresh air; keep warm and quiet; give oxygen if breathing is difficult and seek medical attention.**

SKIN CONTACT: **Remove contaminated clothing; brush material off skin; wash affected area with mild soap and water; seek medical attention if symptoms persist.**

EYE CONTACT: **Flush eyes with lukewarm water, lifting upper and lower eyelids, for at least 15 minutes. Seek medical attention if symptoms persist.**

REACTIVITY DATA

STABILITY

Stable

CONDITIONS CONTRIBUTING TO UNSTABILITY

None

INCOMPATIBILITY (MATERIALS TO AVOID)

None recorded

HAZARDOUS DECOMPOSITION PRODUCTS

None recorded

HAZARDOUS POLYMERIZATION

Will Not Occur

CONDITIONS TO AVOID

None



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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Wear appropriate respiratory and protective equipment specified in section VIII control measures. 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 proper disposal. Take care not to raise dust.

WASTE DISPOSAL METHOD:

Dispose of in accordance with local, state and federal regulations

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION	NIOSH approved dust-mist vapor cartridge respirator.
LOCAL EXHAUST	Recommended
MECHANICAL (general)	Recommended
OTHER	Protective gear suitable to prevent contamination
PROTECTIVE GLOVES	Rubber gloves
EYE PROTECTION	Safety glasses
OTHER PROTECTIVE EQUIPMENT	Protective gear suitable to prevent contamination

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: **None**

TRANSPORTATION REQUIREMENTS	DOT CLASS:	Not Classified
	UN NUMBER:	NC
	IMCO CLASS:	NC
	OTHER:	SPC, Corrosive

PRECAUTIONARY LABELING	NONE
OTHER PRECAUTIONS	NONE

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NA= NOT APPLICABLE

ND= NO DATA FOUND

NR=NOT RECORDED