

Material Safety Data Sheet

Identity: Nickel boride

Formula: Ni₂B

SECTION I - GENERAL INFORMATION

Manufacturer: [Stanford Advanced Materials](#) (SAM)

The information below is believed to be accurate and represents the best information available to SAM. However, SAM makes no warranty, expressed or implied with respect to such information and assumes no liability resulting from its use.

SECTION II – INGREDIENTS/SUMMARY OF HAZARDS

Molecular Weight: 128.23

CAS #	%	OSHA/PEL	ACGIH/TLV
120007-01-1	0-100.0	1mg/m ³	1mg/m ³

SECTION III – PHYSICAL DATA

Physical State: Solid

Boiling Point: N/A	Specific Gravity (H ₂ O=1): 8.50 gm/cc
Melting Point: N/A	Vapor Pressure (vs. air or mmHg): N/A
Evaporation Rate: N/A	Flash Point: N/A
Solubility in water: Decomposes	Percent Volatile: N/A

Appearance and Odor: Metallic pieces and powder, no odor

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Method Used: Flammable Solid

Explosive Limits: LEL: N/A

UEL: N/A

Extinguishing Media:

Use suitable extinguishing agent for surrounding material and type of fire.

Special Fire Fighting Procedures:

Firefighters must wear 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 and Explosion Hazards:

None recorded

SECTION V – HEALTH HAZARDS

Signs and Symptoms of Exposure:

Inhalation: May cause a red, dry, sore nose and throat, coughing and shortness of breath. May also cause irritation to mucous membranes, nasal cavities, pulmonary asthma attacks and pneumonia.

Ingestion: May cause gastritis, convulsions, asphyxia, giddiness, nausea, diarrhea and vomiting. May cause gastroenteritis, nervous symptoms, depression of circulation, persistent vomiting, diarrhea, intestinal disorders shock and coma.

Skin: May cause redness, itching, swelling, burning and ulcers

Eye: May cause red, itching, and watering

Target Organs: May affect the nasal cavity, central nervous system, respiratory system, lungs, blood and skin.

Carcinogenicity: NTP? Yes IARC Monographs? Yes OSHA Regulated? Yes

Medical Conditions Aggravated by Exposure:

Pre-existing respiratory disorders, pulmonary functions, asthma, and skin disorder

Emergency and First Aid Procedures:

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

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

Skin: Remove contaminated clothing, brush material off skin, wash affected area with mild soap and water, and seek medical attention if symptoms persist

Eye: Flush eyes with lukewarm water, lifting upper and lower eyelids for at least 15 minutes and seek medical attention

SECTION VI - REACTIVITY DATA

Stability: Stable

Conditions to Avoid (stability): None

Incompatibility: None recorded

Hazardous Decomposition or Byproducts:

Hazardous Polymerization: Will not occur

Conditions to avoid (hazardous polymerization): None

SECTION VII - PRECAUTIONS FOR 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. Isolate spill area, provide ventilation and extinguish sources of ignition. 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 state, local, and federal regulations.

Hazard Label Information:

Store in cool, dry area and in tightly sealed container. Wash thoroughly after handling.

SECTION VIII - CONTROL MEASURES

Protective Equipment Summary (Hazard Label Information):

NIOSH approved respirator, impervious gloves, safety glasses, clothes to prevent skin contact.

Ventilation:

Local Exhaust: To maintain concentration at low exposure levels. Mechanical (General): Recommended.

Other: Handle in a controlled environment when in powder form.

Work/Hygienic/Maintenance Practices:

Implement engineering and work practice controls to reduce and maintain concentration of exposure at low levels. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Please be advised that N/A can either mean Not Applicable or No Data Has Been Established
