

09/10/92

**Material Safety Data Sheet**

May be used to comply with  
OSHA's Hazard Communication Standard,  
29 CFR 1910.1200. Standard must be  
consulted for specific requirements.

**U.S. Department of Labor**

Occupational Safety and Health Administration  
(Non-Mandatory Form)

Form Approved  
OMB No. 1218-0072



**IDENTITY** (As Used on Label and List)  
VIDENT 550 Be Ni-Cr Be Alloy M140-550

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

**Section I**

Manufacturer's Name MATECH, INC.	Emergency Telephone Number 818-367-2472
Address (Number, Street, City, State, and ZIP Code) 13038 SAN FERNANDO ROAD	Telephone Number for Information 818-367-2472
SYLMAR, CA 91342	Date Prepared 9-02-1992
	Signature of Preparer (optional) <i>Paul A. Stanton</i>

**Section II — Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
NICKEL (Ni)	CAS 7440-02-0	1.0 mg/m <sup>3</sup>		78%
CHROMIUM (Cr)	CAS 7440-47-3	0.5 mg/m <sup>3</sup>		14%
MOLYBDENUM (Mo)	CAS 7439-98-7	10. mg/m <sup>3</sup>		5%
BERYLLIUM (Be)	CAS 7440-41-7	0.5 mg/m <sup>3</sup>		1.8%

**HAZARD DATA**

PURE NICKEL & CHROMIUM (FUMES & DUST)	8 hr TLV - 1.0 mg/m <sup>3</sup>
PURE MOLYBDENUM (FUMES & DUST)	8 hr TLV - 5.0 mg/m <sup>3</sup>
PURE BERYLLIUM (FUMES & DUST)	8 hr TLV - 2.0 mg/m <sup>3</sup>

**Section III — Physical/Chemical Characteristics**

Boiling Point 1	N/A	Specific Gravity (H <sub>2</sub> O = 1)	7.8 gm/cc
Vapor Pressure (mm Hg)	N/A	Melting Point	2450°F
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A

Solubility in Water

NONE

Appearance and Odor

Platinum color/No odor

**Section IV — Fire and Explosion Hazard Data**

Flash Point (Method Used) N/A	Flammable Limits N/A	LEL N/A	UEL N/A
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Extinguishing Media

THIS ALLOY IS FIRE AND EXPLOSION RESISTANT

Special Fire Fighting Procedures

N/A

Unusual Fire and Explosion Hazards

N/A

**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid POWDER MATERIAL CAN REACT WITH Co UNDER REDUCING CONDITIONS TO FORM Ni (Co) 4.
	Stable	X	

Incompatibility (Materials to Avoid) N/A

Hazardous Decomposition or Byproducts N/A

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

**Section VI — Health Hazard Data**

THE COMPONENTS OF THIS ALLOY ARE BIOCOMPATIBLE AND CLINICALLY SAFE, INDIVIDUAL COMPONENTS AND SOME OF THEIR COMPOUNDS, IN DUST FORM, ARE SUSPECTED CAUSES OF LUNG DAMAGE AND ARE POSSIBLE CARCINOGENS. MAJOR SYMPTOMS INCLUDE WEIGHT LOSS AND/OR DIFFICULTY IN BREATHING. OTHER SYMPTOMS; SKIN RASH AND ITCHING.

**EMERGENCY FIRST AID:**

**INHALATION:** Remove person to fresh air, assist breathing with additional Oxygen if necessary.

**EYE CONTACT:** Flush eyes with running water, even under eye lid.

**SKIN CONTACT:** Flush skin and scrub thoroughly with soap and water.

**Section VII — Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material Is Released or Spilled  
PLACE GRINDINGS IN CLOSED CONTAINER. CARE SHOULD BE TAKEN TO MAINTAIN WORK AREA ATMOSPHERE BELOW TLV LEVEL.

Waste Disposal Method  
SHOULD WASTE DISPOSAL BE DEEMED NECESSARY, FOLLOW EPA AND LOCAL REGULATIONS.

Precautions to Be Taken in Handling and Storing  
STORE IN ORIGINAL CONTAINER

Other Precautions  
PROVIDE ADEQUATE LOCAL EXHAUST IN THE GRINDING AREA AND ALSO IN THE MELTING/CASTING AREA.

**Section VIII — Control Measures**

Respiratory Protection (Specify Type)  
USE NIOSH APPROVED RESPIRATORS IF AIRBORNE LEVEL EXCEED EXPOSURE LIMITS

Ventilation	Local Exhaust	Special
	Mechanical (General)	Other
X	ADEQUATE TO ASSURE TLV IS NOT EXCEEDED WHILE MELTING AND GRINDING	

Protective Gloves NOT REQUIRED Eye Protection AS REQUIRED FOR MELTING/CASTING

Other Protective Clothing or Equipment N/A

Work/Hygienic Practices  
AVOID EATING FOOD IN VICINITY OF USE.