

MATERIAL SAFETY DATA SHEET

<b>Section I: Material Identification</b>	
Material Name: Formula 40 Alloy by Speedent, Montclair, CA	
<b>Section II: Ingredients &amp; Hazards</b>	
Nickel (Ni) - 61% (CAS 7440-02-0) Chromium (Cr) - 19.5% (CAS 7440-47-3) Beryllium (Be) - 1.95 Max. (CAS 7440-41-7) Molybdenum (Mo) - 13% (CAS 7439-98-7)	
<b>Hazard Data:</b>	
For pure Beryllium (Fumes & Dust): 8 hr. TLV - 2 ug/m <sup>3</sup> Ceiling level - 5 ug/m <sup>3</sup> Max. for 30 Min. - 25 ug/m <sup>3</sup>	For pure Molybdenum (Fumes & Dust): 8 hr. TLV - mg/m <sup>3</sup>
<b>Section III: Physical Data</b>	
Melting range - 2250 - 2350 F Specific gravity - 7.75 gm/cc Solubility in water-insoluble	Appearance-platinum color, no odor Each ingot weight-approx. 5-8 gms.
<b>Section IV: Fire &amp; Explosion Data</b>	
The alloys are fire and explosion resistant	
<b>Section V: Reactivity Data</b>	
At ordinary and at high temperatures, the alloys oxidize but are stable. At very high temperatures the alloys may produce fumes.	

<b>Section VI: Health Hazard Information</b>	<b>TLV (See Section II)</b>
These alloys contain Nickel, Molybdenum, and Beryllium. University studies have demonstrated these alloys to be bio-compatible and clinically safe. Individual components and some of their compounds in dust and fume form, however, are suspected causes of progressive lung damage and disease and are possible carcinogens. Symptoms include: weight loss and/or difficulty in breathing. Major symptoms: difficulty breathing, weight loss, skin rash and itching.	<b>FIRST AID</b> <b>EYE CONTACT:</b> Flush eyes thoroughly with running water, even under eyelid. <b>SKIN CONTACT:</b> Flush skin and scrub thoroughly with soap and water. <b>INHALATION:</b> Remove person to fresh air, assist breathing with additional oxygen, if necessary.
<b>Section VII: Spill or Leak Procedures</b>	Remove dust by vacuuming or wet sweeping to prevent powdering in the air. Wear respirators and protective clothing. Use containerized disposal. No special precautions are required for bulk (solid) shapes, such as ingots.
<b>Section VIII: Special Protection Information</b>	General and local ventilation and exhaust filtration should be employed. Respirator, goggles, gloves, and coveralls or protective clothing and periodic physical examinations should also be used.
<b>Section IX: Special Precautions</b>	Avoid inhalation of fumes and dust. Avoid skin contact. Wear protective clothing. This alloy contains Beryllium. Beryllium Dust can be toxic-do not inhale. Grind and polish with adequate ventilation only. This alloy contains Nickel and should not be used for individuals with known Nickel sensitivity. Dust containing Nickel should not be inhaled. Melting and fabrication of this alloy should be done in the presence of adequate ventilation.