

# MATERIAL SAFETY DATA SHEET

1 of 2

## **SECTION I – CHEMICAL PRODUCT IDENTIFICATION**

Chemical Name: Niobium

Trade Name or Synonym: Ceramic Brackets

Chemical Family:

Formula:

### **Distributor's Name:**

World Class Technology Corp.

### **Emergency Telephone Number:**

503-472-8320

### **Address:**

1300 NE Alpha Drive  
McMinnville, OR 97128  
USA

### **Information Telephone Number**

503-472-8320

### **Date Issued**

1/13/09

## **SECTION II – COMPOSITION/INFORMATION on INGREDIENTS**

Ingredient Name	Concentration
Cobalt	43 – 48%
Chromium	23 – 31%
Niobium	5 – 18%
Gallium	<7%
Molybdenum	<5%
Wolfram	<4%
Silicium	<1%
Hazardous Components	None
	Nickel-Free, Beryllium-Free

\*Niobium products are not generally considered hazardous in the form they are shipped. Further grinding or cutting or any other procedure that causes a release of dust, hazardous levels of dust may be generated.

## **SECTION III – HAZARDS IDENTIFICATION**

Ingestion: No documented irritations when using product with Niobium in the form they are shipped

Skin Contact: No documented irritations when using product with Niobium in the form they are shipped

Eye Contact: No documented irritations when using product with Niobium in the form they are shipped

Inhalation: No documented irritations when using product with Niobium in the form they are shipped

## **SECTION IV – FIRST AID MEASURES**

In case of releasing dust as described in Section II, the following first aid measures are recommended

Ingestion: While ingestion of large enough quantities to cause health effects is unlikely, consult a physician if it occurs.

Skin Contact: Wash with water and mild detergent

Eye Contact: Flush thoroughly with water. Consult a physician.

Inhalation: Move person to fresh air until recovered. Consult a physician.

## **SECTION V – FIRE FIGHTING MEASURES**

Nonflammable

Extinguishing Media: None

Fire and Explosion Hazard: None

Special Fire Fighting Procedures: None

## **SECTION VI – ACCIDENTAL RELEASE MEASURES**

Sweep up to avoid slipping hazards

Environmental Precautions: None

Disposal: Dispose in accordance with local regulations

## **SECTION VII – HANDLING and STORAGE**

Handling/Storage Precautions: None

Other Precautions: Follow standard laboratory safety practices

The information contained herein is believed to be accurate and is offered in good faith for the user's consideration and investigation. No warranty either expressed or implied is made for the completeness or accuracy of this information whether originating from World Class Technology Corp. or not. User of this material should satisfy themselves by independent investigation of current scientific and medical knowledge that the material can be used safely.

MADE IN USA

**SECTION VIII – EXPOSURE CONTROLS and PERSONAL PROTECTION**

Respiratory Protection: Protective gloves only required when cutting, grinding or welding  
Skin Protection: Protective clothes or equipment only required when cutting, grinding or welding  
Eye Protection: Only required when cutting, grinding or welding  
Work/Hygienic Practices: Follow standard laboratory safety practices

**SECTION IX – PHYSICAL and CHEMICAL PROPERTIES**

Physical Form: Solid  
Color: Metal  
Odor: Odorless  
Solubility in Water: Insoluble  
Melting Point: 1600-1950°C  
Boiling Point: Not known  
Flash Point: Nonflammable  
Specific Gravity: 0.90-0.91  
Specific Weight: 7,4 – 7,8 water=1  
Tensile Strength: 1900 N/mm<sup>2</sup>

**SECTION X – STABILITY and REACTIVITY**

Stability: Stable  
Hazardous Polymerization: Will not occur  
Incompatibility (Materials to Avoid): None known

**SECTION XI – TOXICOLOGICAL INFORMATION**

This material is not hazardous in normal storage and handling

**SECTION XII – ECOLOGICAL INFORMATION**

No ecological effects are known

**SECTION XIII – DISPOSAL CONSIDERATIONS**

Landfill in accordance with all applicable federal, state and local regulations. The possibility of recycling must be proofed under local regulations. Abfallschlüssel-Nr. nach ONORM S 2100: 35101 (Austria)

**SECTION XIV – TRANSPORTATION INFORMATION**

Not dangerous according to current transportation regulations

**SECTION XV – REGULATORY INFORMATION**

Identification according to EC-Directive: No obligatory indication  
No obligatory identification according to the ChemG BGBl.Nr. 53/1997 (Österreich)

**SECTION XVI – OTHER INFORMATION**

N/A = Not Applicable

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