

MATERIAL SAFETY DATA SHEET

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SECTION I – CHEMICAL PRODUCT IDENTIFICATION

Chemical Name: β IIIICNA™, Beta 3, TitanMoly

Trade Name or Synonym: Orthodontic wires

Chemical Family: Specialty stainless steel alloys

Formula: N/A

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

2/12/09

SECTION II – COMPOSITION/INFORMATION on INGREDIENTS

Ingredient Name	Concentration %	PEL/TLV 8-hour TWA (UON)
Beta III Titanium (Ti) 7440-32-6	62-81.75%	PEL 5.0 mg/m3 TLV 10 mg/m3
Zirconium (Zr) 7440-67-7	4.5-10%	PEL 5.0 mg/m3 TLV 5.0 mg/m3
Tin (Sn) 7440-31-5	3.75-8%	PEL 2.0 mg/m3 TLV 2.0 mg/m3
Molybdenum (Mo) 7439-98-7	10-20%	PEL 5.0 mg/m3 TLV 10.0 mg/m3

SECTION III – HAZARDS IDENTIFICATION

Articles made from titanium and titanium alloys are not ignitable, corrosive or reactive. Dust and powders are a moderate fire and explosion hazard when exposed to heat, flame, electric current or static electricity.

For purposes of this MSDS, occupational exposure to alloys is taken to mean dusts, fumes or solutions containing metals that can become airborne or can spill on skin or in the eye. Occupational exposure to alloys does not include solid products (i.e. ingots or castings), provided no particle-generating operations, such as grinding or cutting, occur. In most industrial situations, the significant routes of exposure would include inhalation, skin and eye contact.

SECTION IV – FIRST AID MEASURES

Inhalation: Use local ventilation and/or respiratory protective equipment to limit exposure to airborne dusts. If sudden overexposure does occur: remove victim to fresh air, begin artificial respiration if victim is not breathing

Skin Contact: Exposure or repeated contact may irritate the skin. Avoid frequent and prolonged contact. Wear suitable protective clothing and gloves. In case of contact: brush off skin and clothing; wash with soap and water; remove metallic particles and cleanse wounds.

Ingestion: Seek prompt medical help.

Eyes: Flush eyes with water.

SECTION V – FIRE FIGHTING MEASURES

Solid Metal: not ignitable

Dust and Powder: Titanium fines can ignite if airborne. They are a moderate fire and explosive hazard when exposed to heat, flame, electric current or static electricity.

Extinguishing Media: DO NOT USE WATER OR CO₂ EXTINGUISHERS! Sand, dolomite, graphite powder or sodium chloride work best.

SECTION VI – ACCIDENTAL RELEASE MEASURES

Solid Form: Return to the original container and recycle.

Dust: Cleanup personnel should wear protective clothing and equipment: gloves, goggles, aprons, respirators, etc. Keep airborne dust to a minimum. Avoid dry sweeping of fines. Sweep or vacuum up spilled materials. Wet down area if necessary, but do not flush into drains or waterways. Place in a metal or plastic drum; seal and save for reclamation.

SECTION VII – HANDLING and STORAGE

Use good housecleaning practices to prevent accumulation of dust, and follow cleaning techniques (vacuuming and wet sweeping) that will keep dusting to a minimum. Do not eat, drink or smoke in areas where metal dusts or fumes are generated.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

Solid Form: Special protective clothing is not normally needed.

Fumes and Dust: Provide local exhaust ventilation in areas where metal fumes or dusts are.

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 IX – PHYSICAL and CHEMICAL PROPERTIES

The alloy is sold as dark gray ingots or castings or as drawn fine wires. The material is not soluble in water and has no odor.

SECTION X – STABILITY and REACTIVITY

Titanium and titanium alloys are not reactive.

SECTION XI – TOXICOLOGICAL INFORMATION

Product tested for bio-compatibility with results concluding negative toxicological reaction.

SECTION XII – ECOLOGICAL INFORMATION

Not available

SECTION XIII – DISPOSAL CONSIDERATIONS

Solid Forms: Articles made of titanium are not hazardous. No special disposal regulations apply.

Dust and Fines: If airborne, titanium fines can burn. When ignited, titanium is very difficult to extinguish. Before being disposed of, titanium fines should be stabilized (solidified or diluted with sand or other non-combustible substances) to prevent being ignited.

Titanium alloys can be landfilled as an industrial waste.

SECTION XIV – TRANSPORTATION INFORMATION

None of the materials in this product are regulated as hazardous by the Department of Transportation

SECTION XV – REGULATORY INFORMATION

Titanium and titanium alloys are not hazardous

SECTION XVI – OTHER INFORMATION

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.

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