



**TALLADIUM, INC.**  
**MATERIAL SAFETY DATA SHEET**

27360 W. Muirfield Lane, Valencia ! California 91355 USA  
 (661) 295-0900 • (800) 221-6449

**SECTION I – IDENTIFICATION**

ISSUE DATE: 11/25/85 REVISED: 03/30/04

Product Name: TALLADIUM TILITE® CERAMIC ALLOYS  
 Premium - Vita - Star – Omega  
 TALLADIUM LUMINITE-PFM ALLOY  
 TALLADIUM LUMINITE-PRESS ALLOY  
 Grade Name: Nickel Chromium Titanium Alloy

**SECTION II – COMPOSITION INFORMATION ON INGREDIENTS**

**OCCUPATION STANDARDS**

SUBSTANCE	C.A.S	% Range By Weight	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Nickel	7740-02-0	60 - 76	1.0	1.0
Chromium	7440-47-3	12 - 21	1.0	0.5
Molybdenum	7439-98-7	4 - 14	0.05	0.05
Titanium	7440-32-6	4 - 6	N/E	N/E
Intermetallic Beryllide	Not Established	< 1.8	0.005	0.002

In compliance with ADA Guidelines and ISO-9000 for Cast Dental Alloys

**SECTION III - HEALTH HAZARD DATA**

This alloy contains Nickel, Chromium, Molybdenum, and less than 1.8% Intermetallic Beryllide – all in an alloyed compounded state with no raw metals available. University studies have demonstrated these alloys to be biocompatible and clinically safe. Dental Laboratory technicians work with a variety of potentially toxic substances, including various dusts from silica, silicon carbide, ceramics (such as porcelain) and metallic alloys. It is recommended to follow good industrial hygiene practice, which includes reducing airborne exposures to the lowest feasible level for all constituents of all dental laboratory substances.

**Emergency and First Aid Procedures:**

- Eyes: Flush thoroughly with running water. Obtain medical assistance if irritation persists.
- Skin: Wash with soap and water. Obtain medical assistance if irritation persists.
- Inhalation: Remove to fresh air
- Ingestion: Not applicable.



#### **SECTION IV - FIRE AND EXPLOSION DATA**

Flash Point:	None
Extinguishing Media:	Not Combustible
Special Fire Fighting Procedures:	None
Unusual Fire & Explosion Hazards:	None

#### **SECTION V - SPILL OR LEAK PROCEDURES**

Spill or Leak Procedures:	Sweep or vacuum material into waste container for disposal. If molten - cool and recycle
Waste Disposal Method:	In accordance with Local, State and Federal Regulation.

#### **SECTION VI - SPECIAL PRECAUTIONS**

When melting, casting, and grinding surface of alloys, exposure to airborne particles in excess of occupational standards can occur IF proper local exhaust ventilation is not utilized. Assistance in establishing safe procedures may be obtained from TALLADIUM by calling (800) 221-6449.
---

#### **SECTION VII - SPECIAL PROTECTION**

Respiratory:	Provide ventilation and when in excess of LTV use NIOSH approved mask respirator.
Protective Equipment:	Goggles may be needed to avoid splatters into eyes. Gloves may be desirable for specific work situations. Flame retardant apron when melting alloy.

#### **SECTION VIII - PHYSICAL DATA**

Boiling Point:	No Data
Melting Point:	2200° F
Specific Gravity:	7.7
Appearance & Odor:	Solid - Odorless
Solubility in Water:	Not Applicable

#### **SECTION IX - REACTIVITY DATA**

Stability:	Stable
Incompatibility:	None
Hazardous Decomposition Products	Will Not Occur
Hazardous Polymerization	Will Not Occur