



**TALLADIUM, INC.**  
**SAFETY DATA SHEET**  
**27360 W. Muirfield Lane, Valencia • California 91355**  
**(661) 295-0900 • (800) 221-6449**

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**Section 1 - Product and Company Identification**

**Date of SDS:** 04/15/2008

**Review Date:** 06/17/2014

**Product Identification:** Talladium Tilite® Premium Ceramic Alloy

**Product Synonym:** Nickel Chromium Titanium Alloy

**Product Class/Use:** Cast Dental Alloys

**Company Name:** Talladium, Incorporated

**Company Address:** 27360 West Muirfield Lane  
Valencia, California 91355  
United States of America

**General Information Telephone:** (661)-295-0900

**Emergency Telephone:** Not required by regulations.

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**Section 2 - Composition/Information on Ingredients**

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	72%	1.0	1.0
Chromium	7440-47-3	13%	0.1	0.5
Molybdenum	7439-98-7	5%	10	10
Titanium	7440-32-6	4.2%	N/E	N/E
Aluminum	7429-90-5	2%	15	10
Intermetallic Beryllide	Not Established	< 1.8	0.005	0.002

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

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**Section 3 - Hazards Identification, Including Emergency Overview**

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. NTP anticipates or confirms Nickel and Chromium to be human carcinogens. IARC classifies Nickel and Chromium as possibly carcinogenic to humans.

**Inhalation:** May cause irritation to the nose, throat, lungs and mucous membranes. Nickel and Chromium dust may cause headache, dizziness, coughing and difficulty of breathing.

**Eyes:** Particulate metal dust may be dangerous to the eye and surrounding tissue.

**Skin:** May cause in some sensitive individuals an allergic response. Nickel prolonged exposure may cause dermatitis.

**Ingestion:** Ingestion of Nickel or Chromium dust or powder may cause gastrointestinal irritation or liver damage.



# TALLADIUM, INC. SAFETY DATA SHEET

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## Section 4 - First Aid Measures

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**Inhalation:** Remove to fresh air. If breathing is difficult, victim should be given oxygen. If unconscious, evaluate need for artificial respiration and obtain immediate medical attention.

**Eyes:** If contact occurs, flush eyes immediately with ample water. If irritation develops, seek medical attention.

**Skin:** If contact occurs, wash skin immediately with water. If product is hot, immediately immerse or flush the affected area with large amounts of cold water to dissipate heat. Cover the affected area with gauze and obtain prompt medical attention.

**Ingestion:** Swallow large quantities of water. Induce vomiting. Never give anything by mouth to unconscious person.

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## Section 5 - Fire Fighting Measures

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**Extinguishing Media:** Not combustible

**OSHA Flammability Classification:** None

**Flash Point/ Method:** Not determined

**Auto-ignition Temperature:** Not determined

**Explosive Lower Limit(s):** Not determined

**Explosive Upper Limit(s):** Not determined

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## Section 6 - Accidental Release Measures

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**Spill Release Procedures:** Allow molten material to solidify and scrape up. Collect material and place in disposal container. Follow relevant local, state, provincial and federal laws and regulations. Avoid contamination of ground water and soil.

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## Section 7 - Handling and Storage

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**Handling and Storage Precautions:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing vapors from heated material. Store in dry place

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## Section 8 - Exposure Controls & Personal Protection

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### Additional Exposure Limit Information:

#### Particulates not otherwise classified:

	<i>Value</i>	<i>Limit</i>	<i>Ref.</i>
Inhalation particulate	10 mg/m <sup>3</sup>	TWA/TLV	OSHA
Respiration particulate	3 mg/m <sup>3</sup>	TWA/TLV	OSHA

#### Particulates not otherwise regulated:

	<i>Value</i>	<i>Limit</i>	<i>Ref.</i>
Total particulate	15 mg/m <sup>3</sup>	TWA/PEL	OSHA
Respiration particulate	5 mg/m <sup>3</sup>	TWA/PEL	OSHA

**Ventilation:** If use generates dust or fumes, use ventilation to control airborne exposure and keep below PEL.

**Respiratory Protection:** In case of exposure to fumes from hot processing, use appropriate NIOSH-approved respiratory protective equipment.

**Eye Protection:** Wear safety glasses with side shields.

**Skin Protection:** Gloves may be desirable for specific work situations. Flame retardant apron when melting.

**Other Protective Equipment:** A safety shower and eye wash fountain should be readily available. It is recommended that a hazard assessment in accordance with the OSHA Personal Protective Equipment (PPE) Standard in 29 C.F.R. §1910.132 be conducted before using this product in order to identify additional PPE requirements.



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

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**Section 9 - Physical & Chemical Properties**

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<b>Boiling Point:</b> Not available	<b>Specific Gravity:</b> 7.7
<b>Melting Point:</b> 2200° F	<b>Evaporation Rate:</b> N/A
<b>pH:</b> N/A	<b>Solubility in Water:</b> N/A
<b>Vapor Pressure:</b> N/A	<b>Appearance:</b> Solid
<b>Vapor Density:</b> Heavier than air ( i.e., >1 )	<b>Odor:</b> Odorless

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**Section 10 - Stability & Reactivity Data**

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**Stability:** Stable under normal storage conditions.  
**Hazardous Polymerization:** Will not occur under normal conditions.  
**Conditions to Avoid:** None in applicable use.  
**Incompatibility with Other Materials:** No known incompatibility with other materials  
**Hazardous Decomposition Products:** No known hazardous decomposition products.

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**Section 11 - Toxicological Information**

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**Toxicological Information:** None available

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**Section 12 - Ecological Information**

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**Ecological Information:** Considered chemically inert in the environment.

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**Section 13 - Disposal Considerations**

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**Waste Disposal Methods:** Follow all federal, state, and local regulations.

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**Section 14 - Transport Information**

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**U.S. DOT Information:** Not regulated.

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**Section 15 - Regulatory Information**

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**Federal Regulatory Information:**

**OSHA:** This product does contain hazardous material as defined in Section 3. Standard 29 CFR 1910.132.

**EPA:** This product is not defined as hazardous waste per 40 CFR 261.

**Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III**

**Section 313:** This product contains components subject to reporting requirements.

**State Regulatory Information:**

**Canada:** This product is listed on the DSL.

**California:** Proposition 65: This product contains substances known to the State of California to cause cancer.



**TALLADIUM, INC.  
SAFETY DATA SHEET**

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**Section 16 - Other Information**

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The information and recommendations above are believed to be accurate and represent the best information currently available to us. The person receiving the above material should make their own determination as to the suitability for their use. Talladium makes no warranty expressed or implied with respect to this information and assumes no liability resulting from its use.