



**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**

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**Date of SDS:** 09/06/1987

Review Date: 04/26/2016

**Revision Date:** 04/26/2016

**Product Identification:** Hi-Tech Pre-Flux #702

**Product Class/Use:** For brazing dental alloy

**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**

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SUBSTANCE	C.A.S	% Range by Weight	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Boric Acid	10043-35-3	40 - 70%	5 (respirable)	2 (inhalable)
Borate	N/A	10 - 30%	5 (respirable)	2 (inhalable)
Potassium bifluoride	7789-29-9	5 - 10%	2.5 (as fluoride)	2.5 (as Fluoride)
Water	7732-18-15	10 - 30%	^	^

^ This material is a non-hazardous substance

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**Section 3 - Hazard Identification**

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Expected route of entry: Product is in paste form, therefore, inhalation of dust is not an expected route of entry. Product can be absorbed through broken skin.



**Health hazards:**

**Inhalation:** (If the product were to dry out) inhalation of the dust could cause irritation of the respiratory system.

**Skin:** Harmful if absorbed through damaged skin. May cause irritation.

**Eyes:** Will cause irritation.

**Ingestion:** Boric acid is poisonous by ingestion and possibly other routes.

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**Section 4 - First Aid Measures**

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**Inhalation:** If irritation to the respiratory system or difficulty of breathing occurs, remove to fresh air and seek medical attention immediately.

**Eyes:** If contact occurs, remove any contact lenses, flush eyes immediately with water for 15 minutes, holding the eyelids apart to ensure rinsing of the whole eye area. Seek immediate medical attention.

**Skin:** If contact occurs, wash thoroughly with soap and water then rinse. If irritation occurs seek medical attention.

**Ingestion:** Do NOT induce vomiting. If vomiting occurs, keep head low to keep out of the lungs. Rinse out mouth, drink 8 ounces or more of water or milk if conscious. If the person is unconscious do not give anything by mouth. Seek immediate medical attention.



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### Section 5 - Fire Fighting Measures

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**Extinguishing Media:** This product is non-flammable. Use appropriate means to extinguish surrounding fire. Cool exposed containers if possible using water spray.

**Specific hazards during a fire:** Avoid inhalation of fumes or vapors. Product decomposes in fire liberating hydrogen fluoride and potassium oxide.

**Special precautions:** Firefighters should wear self-contained breathing apparatus and full protective clothing during fire.

**General fire hazards:** No unusual fire or explosion hazards noted.

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### Section 6 - Accidental Release Measures

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**Spill Release Procedures:** Avoid inhalation of airborne dust. Ensure adequate ventilation. Absorb in dry sand or earth and place into appropriate container. Avoid runoff into storm sewers and ditches. Do not allow contamination of ground water and soil. Place into proper disposal container(s). Follow local, state, provincial and federal laws and regulations.

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### Section 7 - Handling and Storage

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**Handling and Storage Precautions:**

Use with adequate ventilation. Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing. Do not handle food, drink or smoke while using this product. Wash thoroughly after handling. Keep out of the reach of children. Keep away from food and drink. Store in tightly closed original container in a dry cool, do not store above 104°F (40°C) and well ventilated locked area away from incompatible materials (*see section 10*).

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### Section 8 - Exposure Controls & Personal Protection

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*(See section 2 for exposure control)*

**Ventilation:** Use adequate exhaust ventilation to maintain exposure levels below applicable limits.

**Respiratory Protection:** Use appropriate NIOSH-approved respiratory protective equipment.

**Eye Protection:** Wear chemical goggles and face shield with UV/IR protection based on the welding process in use.

**Skin Protection:** Wear PVA/Latex or other chemical resistant gloves, lab coat or coveralls.

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### Section 9 - Physical & Chemical Properties

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**Boiling Point:** Decomposes. Water ~202°F (~100°C)

**Melting Point/Freezing Point:** ~300°F (~165°C)

**Relative Density temperature:** 1.5 – 1.7

**Decomposition Temperature:** >750°F (>400°C)

**Appearance:** White paste

**Odor:** Odorless

**Solubility in Water:** Dilutable with water

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### Section 10 - Stability & Reactivity Data

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**Stability:** Stable

**Reactions:** Hazardous polymerization will not occur.

**Incompatible materials:** Strong acids, Acetic anhydride, elemental potassium.

**Hazardous Decomposition Products:** Heating may produce hydrogen fluoride and potassium oxide.

**Conditions to avoid:** Elevated temperatures.



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## Section 11 - Toxicological Information

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**Inhalation of dust/vapors:** May cause irritation and burns to nose and throat.

**Skin:** May cause irritation.

**Eyes:** May cause irritation.

**Ingestion is not a likely route of exposure:** Avoid ingestion.

**Carcinogenicity:** Not Classified

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## Section 12 - Ecological Information

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**Biodegradability:** Unknown

**Environmental toxicity:** EC50 48-hour values are expected to be over 100gm/l.

This material may be toxic to aquatic life.

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## Section 13 - Disposal Considerations

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**Waste Disposal Methods:** Collect and dispose of in accordance with federal, state, and local regulations for wastes containing inorganic fluorides.

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## Section 14 - Transport Information

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**DOT:** Not regulated.

**UN identification number:** Not regulated

**DOT shipping description:** N/A

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## Section 15 - Regulatory Information

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**Toxic Substances Control Act (TSCA):** All ingredients are listed on the TSCA inventory of chemical substances.

**Superfund Amendments & Reauthorization Act (SARA):** This material does not contain ingredients which require reporting under SARA Title III

**Resource Conservation & Recovery Act (RCRA):** This material contains an ingredient which has the characteristic of corrosivity.

**RoHS & REACH:** This material contains an ingredient which is listed as a substance of very high concern (SVHC) - Boric Acid.

### Hazard Codification & Labeling Requirements:

H303 – May be harmful if swallowed.

H312 – Harmful in contact with skin.

H315 – Causes skin irritation.

H320 – Causes eye irritation.

H371 – Target organ (acute), May cause damage to CNS and digestive tract.

H373 – Target organ (chronic), May cause damage to kidney, skeletal system and bones through prolonged or repeated exposure.

H401 (H412) – Harmful to aquatic life (with long lasting effects.)



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**Section 16 - Other Information**

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**NFPA Ratings (estimated):**

Health - 2

Flammability - 0

Reactivity - 1

**WHMIS Category:** Class D, Division 2: Boric Acid



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