

Heeger Materials Inc.  
Safety Data Sheet  
Tungsten Boride

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1. Product and Company Identification

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Trade Name: Tungsten boride  
Chemical Formula and Recommended Use: WB Scientific research and development

Manufacturer/Supplier: Heeger Materials Inc.  
Street: 230 Steele St  
City: Denver  
State: Co  
Zip Code: 80206  
Country: USA

Tel #: 925-385-8104

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word: None  
Hazard Statements: None  
Precautionary Statements: None

HMIS Health Ratings (0-4):  
Health: 1  
Flammability: 0  
Physical: 0

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3. Composition

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Chemical Family: Ceramic Additional Names: None

Tungsten boride (WB):  
Percentage: 100 wt%  
CAS #: 12007-09-9

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4. First Aid Procedures

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General Treatment: Seek medical attention if symptoms persist.  
Special Treatment: None  
Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.  
Ingestion: Seek Medical Attention.  
Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.

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Eyes:	Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
	5. Firefighting Measures
Flammability:	Non-flammable
Extinguishing Media:	No special restrictions – use suitable extinguishing agent for surrounding material and type of fire.
Spec. Fire Fighting Procedure:	Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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#### 6. Accidental Release Measures

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If Material Is Released/Spilled:	Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.
Environmental Precautions:	Isolate runoff to prevent environmental pollution.

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#### 7. Handling and Storage

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Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

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#### 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	N/A
Threshold Limit Value:	5 mg/m <sup>3</sup> as W, long-term value
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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#### 9. Physical and Chemical Characteristics

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Color	Silver
Form:	Powder
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	N/A

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Flash Point: N/A  
Autoignition Temperature: N/A  
Density: N/A  
Molecular weight: 194.66 g/mol

10. Reactivity

Stability: Stable under recommended storage conditions  
Reacts With: Oxidizing agents  
Incompatible Conditions: None Hazardous Decomposition Products:  
Metal oxide fume, Boron oxide

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11. Toxicological Information

Potential Health Effects:

Eyes: May cause irritation  
Skin: May cause irritation  
Ingestion: May cause irritation  
Inhalation: May cause irritation  
Chronic: Boron affects the central nervous system. Boron poisoning causes depression of the circulation, persistent vomiting and diarrhea, followed by profound shock and coma. The temperature may become subnormal and a scarletina form rash may cover the entire body. Tungsten compounds may be irritating to the eyes and respiratory tract. Chronic exposure may result in permanent lung damage.

Signs & Symptoms: N/A Aggravated Medical Conditions:  
N/A

Median Lethal Dose: N/A

Carcinogen: N/A

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12. Ecological Information

Aquatic Toxicity: Low  
Persistent Bioaccumulation Toxicity: No  
Very Persistent, Very Bioaccumulative: No Notes:  
N/A

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13. Disposal Considerations

Dispose of in accordance with local, state, national, and international regulations.

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14. Transportation Data

Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: No  
Hazardous: Not hazardous for transportation.

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Hazard Class:	N/A
Packing Group:	N/A
UN Number:	N/A
Proper Shipping Name:	N/A

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#### 15. Regulatory Information

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#### 16. Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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*Heeger Materials Inc*