## Heeger Materials Inc. Safety Data Sheet Praseodymium Fluoride

	1. Product and Company Identification	
Trade Name: Chemical Formula: Recommended Use:	Praseodymium fluoride PrF <sub>3</sub> Scientific research and development	
Manufacturer/Supplier:	Heeger Materials Inc.	
Adress:	230 Steele St Denver CO 80206 United States	
Tel #:	925-385-8104	
24-Hour Emergency Contact:	800-424-9300 (US & Canada) +1-703-527-3887 (International)	
	2. Hazards Identification	
Signal Word:	Danger	
Hazard Statements:	H302+H312: Harmful if swallowed or in contact with skin H331: Toxic if inhaled H315: Causes skin irritation H319 Causes serious eye irritation H335: May cause respiratory irritation	
Precautionary Statements:	<ul> <li>P261 Avoid breathing dust/fume/vapor</li> <li>P280: Wear protective gloves/protective clothing/eye protection/face protection</li> <li>P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing</li> <li>P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing</li> <li>P405: Store locked up</li> <li>P501: Dispose of contents/container in accordance with local/regional/national/international regulations</li> </ul>	
HMIS Health Ratings (0-4): Health: Flammability: Physical:	2 0 1	

	3. Composition		
Chemical Family:	Salt		
Additional Names:	Praseodymium trifluoride, Praseodymium(III) Fluoride		
Praseodymium fluoride (PrF <sub>3</sub> ):			
Percentage:	100 wt%		
CAS #:	13709-46-1		
EC #:	237-254-9		
	4. First Aid Procedures		
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		
Error	contaminated clothing. Flush eyes with water, blinking often for several minutes. Remove		
Eyes:	contact lenses if present and easy to do. Continue rinsing		
	5. Firefighting Measures		
	Non-flammable		
Extinguishing Media:	CO <sub>2</sub> , extinguishing powder or water spray. Fight larger fires with water		
	spray or alcohol resistant foam.		
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.		
	6. Accidental Release Measures		
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.		
Environmental Precautions:	Take care not to raise dust. Isolate runoff to prevent environmental pollution.		
	Isolate fution to prevent environmental pollution.		
	7. Handling and Storage		
Handling Conditions:	Handle under dry protective gas. Wash thoroughly after handling.		
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store under dt		
Work/Hygienic Maintenance:	inert gas. Store apart from materials and conditions listed in section 10 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		

8. Exp	osure Controls and Personal Protection
Permissible Exposure Limits:	2.5 mg/m <sup>3</sup> as F, long-term value
Threshold Limit Value:	2.5 mg/m <sup>3</sup> as F, 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.
9. Pl	hysical and Chemical Characteristics
Color	Green
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	Odorless
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	1395 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	6.2 g/cc
Molecular weight:	197.90 g/mol
	10. Reactivity
Stability:	Stable under recommended storage conditions
Reacts With:	Acids, Water, Reducing agents, Oxidizing agents
Incompatible Conditions:	Water/moisture
Hazardous Decomposition Products:	Hydrogen fluoride, Metal oxide fume
	11. Toxicological Information
Potential Health Effects:	
Eyes:	May cause irritation
Skin:	Harmful, Danger through skin absorption
Ingestion:	Harmful
Inhalation:	Toxic
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	N/A
Carcinogen:	N/A
	12. Ecological Information
Aquatic Toxicity:	Low
Persistent Bioaccumulation Toxicity:	No
Very Persistent, Very Bioaccumulative:	No
Notes:	N/A
	13. Disposal Considerations

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

	14. Transportation Data
Hazardous:	Hazardous as powder only
	POISON 6
Hazard Class:	6.1 Toxic substances
Packing Group:	III
UN Number:	UN3288
Proper Shipping Name:	Toxic solid, inorganic, n.o.s. (Praseodymium fluoride)
	15. Regulatory Information
Sec 302 Extremely Hazardous:	No
Sec 304 Reportable Quantities:	N/A
Sec 313 Toxic Chemicals:	No
	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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