



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1"> <tr><td>Health Hazard</td><td style="text-align: center;">1</td></tr> <tr><td>Fire Hazard</td><td style="text-align: center;">0</td></tr> <tr><td>Reactivity</td><td style="text-align: center;">0</td></tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

<b>Section 1. Chemical Product and Company Identification</b>		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Niobium AA Standard</b>	<b>Catalog Number(s)</b> : AA245
<b>Manufacturer</b>	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>CAS#</b> : Mixture.
<b>Commercial Name(s)</b>	Not available.	<b>RTECS</b> : Not applicable.
<b>Synonym</b>	Not available.	<b>TSCA</b> : TSCA 8(b) inventory: Hydrogen fluoride; Water
<b>Chemical Name</b>	Not applicable.	<b>CI#</b> : Not available.
<b>Chemical Family</b>	Not available.	<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b>  CALL (310) 516-8000
<b>Chemical Formula</b>	Not applicable.	
<b>Supplier</b>	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

<b>Section 2. Composition and Information on Ingredients</b>					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Ammonium hexafluoronibate	12062-13-4				0.2
2) Hydrogen fluoride	7664-39-3	2			0.1
3) Water	7732-18-5				99.7

<b>Toxicological Data on Ingredients</b>	<b>Hydrogen fluoride:</b> VAPOR (LC50): Acute: 483 ppm 4 hour(s) [Rat].
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<b>Section 3. Hazards Identification</b>	
<b>Potential Acute Health Effects</b>	Slightly hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, . Non-irritant for lungs.
<b>Potential Chronic Health Effects</b>	Non-corrosive for skin. Non-irritant for skin. Non-sensitizer for skin. Non-permeator by skin. Non-irritating to the eyes. Non-hazardous in case of ingestion. Non-hazardous in case of inhalation. <b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

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**Section 4. First Aid Measures**

<b>Eye Contact</b>	Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used.
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

<b>Precautions</b>	Avoid contact with skin. Never add water to this product. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep container tightly closed and dry.
<b>Storage</b>	No specific storage is required. Use shelves or cabinets sturdy enough to bear the weight of the chemicals. Be sure that it is not necessary to strain to reach materials, and that shelves are not overloaded.

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	No special ventilation requirements.
<b>Personal Protection</b>	Safety glasses. Lab coat. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	<p><b>Hydrogen fluoride</b>  TWA: 3 (ppm) from ACGIH (TLV)  TWA: 2 (mg/m<sup>3</sup>) from ACGIH</p> <p>Consult local authorities for acceptable exposure limits.</p>

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Not available.	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Neutral.	<b>Color</b>	Not available.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	The only known value is 1 (Water = 1) (Water).		
<b>Vapor Pressure</b>	Not available.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water.		
<b>Solubility</b>	Easily soluble in cold water, hot water.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Non-reactive with metals, alkalis.

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<b>Corrosivity</b>	Slightly corrosive to corrosive in presence of zinc. Non-corrosive in presence of glass, of steel, of aluminum.
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<b>Special Remarks on Reactivity</b>	Not available.
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<b>Special Remarks on Corrosivity</b>	Not available.
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<b>Polymerization</b>	Not available.
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**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Not available.
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<b>Toxicity to Animals</b>	LD50: Not available. LC50: Not available.
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<b>Chronic Effects on Humans</b>	The substance is toxic to lungs, mucous membranes.
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<b>Other Toxic Effects on Humans</b>	Slightly hazardous in case of skin contact (corrosive, irritant), of ingestion, . Non-irritant for lungs.
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<b>Special Remarks on Toxicity to Animals</b>	Not available.
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<b>Special Remarks on Chronic Effects on Humans</b>	Not available.
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<b>Special Remarks on other Toxic Effects on Humans</b>	Not available.
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**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
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<b>BOD5 and COD</b>	Not available.
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<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
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<b>Toxicity of the Products of Biodegradation</b>	The product itself and its products of degradation are not toxic.
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<b>Special Remarks on the Products of Biodegradation</b>	Not available.
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**Section 13. Disposal Considerations**

<b>Waste Disposal</b>	
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**Section 14. Transport Information**

<b>DOT Classification</b>	Not a DOT controlled material (United States).
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<b>Identification</b>	Not applicable.
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<b>Special Provisions for Transport</b>	Not applicable.
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DOT (Pictograms)



**Section 15. Other Regulatory Information and Pictograms**

Federal and State Regulations

Pennsylvania RTK: Hydrogen fluoride  
 Massachusetts RTK: Hydrogen fluoride  
 TSCA 8(b) inventory: Hydrogen fluoride; Water  
 SARA 302/304/311/312 extremely hazardous substances: Hydrogen fluoride  
 SARA 313 toxic chemical notification and release reporting: Hydrogen fluoride  
 CERCLA: Hazardous substances.: Hydrogen fluoride;

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications

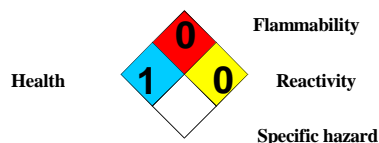
**WHMIS (Canada)** Not controlled under WHMIS (Canada).

**DSCL (EEC)** This product is not classified according to the EU regulations.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	b

**National Fire Protection Association (U.S.A.)**



WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Lab coat.



Not applicable.  
Safety glasses.

**Section 16. Other Information**

**MSDS Code** ANIOB

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/12/2006.

CALL (310) 516-8000

**Notice to Reader**

*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*