

### SECTION 1: Identification

#### 1.1. Identification

Product form : Substance  
 Substance name : Hydrogen fluoride, anhydrous  
 CAS-No. : 7664-39-3  
 Product code : M009-3-01  
 Formula : FH

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Laboratory chemicals  
 Manufacture of substances  
 Scientific research and development

#### 1.3. Supplier

SynQuest Laboratories, Inc. Inc.  
 P.O. Box 309  
 Alachua, FL, Alachua, 32615  
 United States of America  
 T (386) 462-0788 - F (386) 462-7097  
[info@synquestlabs.com](mailto:info@synquestlabs.com) - [www.synquestlabs.com](http://www.synquestlabs.com)

#### 1.4. Emergency telephone number

Emergency number : (844) 523-4086 (3E Company - Account 10069)

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

##### GHS US classification

Gases under pressure Liquefied gas	H280	Contains gas under pressure; may explode if heated
Acute toxicity (oral) Category 2	H300	Fatal if swallowed
Acute toxicity (dermal) Category 2	H310	Fatal in contact with skin
Acute toxicity (inhalation) Category 1	H330	Fatal if inhaled
Acute toxicity (inhalation:vapor) Category 2	H330	Fatal if inhaled
Skin corrosion/irritation Category 1A	H314	Causes severe skin burns and eye damage
Serious eye damage/eye irritation Category 1	H318	Causes serious eye damage
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335	May cause respiratory irritation

Full text of H statements : see section 16

#### 2.2. GHS Label elements, including precautionary statements

##### GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H280 - Contains gas under pressure; may explode if heated  
 H300+H310+H330 - Fatal if swallowed, in contact with skin or if inhaled

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Precautionary statements (GHS US)	: H314 - Causes severe skin burns and eye damage H318 - Causes serious eye damage H335 - May cause respiratory irritation P260 - Do not breathe dust/fume/gas/mist/vapors/spray. P262 - Do not get in eyes, on skin, or on clothing. P264 - Wash skin thoroughly after handling P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P284 - In case of inadequate ventilation wear respiratory protection P301+P310 - If swallowed: Immediately call a poison center or doctor. P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting. P302+P352 - If on skin: Wash with plenty of soap and water P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 - Immediately call a POISON CENTER or doctor/ physician P320 - Specific treatment is urgent (see supplemental first aid instructions on this label) P321 - Specific treatment (see supplemental first aid instructions on this label) P322 - Specific treatment (see supplemental first aid instruction on this label) P330 - Rinse mouth. P361+P364 - Take off immediately all contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P403+P233 - Store in a well-ventilated place. Keep container tightly closed. P405 - Store locked up. P410+P403 - Protect from sunlight. Store in a well-ventilated place. P501 - Dispose of contents/container to an approved waste disposal plant
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### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification	: Anhydrous HF can react with iron in steel cylinders to produce iron fluoride and hydrogen resulting in significant pressure inside the cylinder. Pressure should be checked upon receiving and excess pressure from hydrogen must be vented on an annual basis, and . Pressures can reach the rupture point of the cylinder. All equipment used for pressure testing and venting used must be able to withstand extreme pressure and be compatible with HF.
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### 2.4. Unknown acute toxicity (GHS US)

No additional information available

## SECTION 3: Composition/Information on ingredients

### 3.1. Substances

Substance type	: Mono-constituent
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Name	Product identifier	%	GHS US classification
Hydrogen fluoride, anhydrous (Main constituent)	CAS-No.: 7664-39-3	≤ 100	Press. Gas (Liq.), H280 Acute Tox. 2 (Oral), H300 Acute Tox. 2 (Dermal), H310 Acute Tox. 1 (Inhalation), H330 Acute Tox. 2 (Inhalation:vapour), H330 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. Remove contaminated clothing and shoes. In case of skin contact, wearing rubber gloves rub 2.5% calcium gluconate gel continuously into the affected area for 1.5 hours or until further medical care is available. Get immediate medical advice/attention.
First-aid measures after eye contact	: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid measures after ingestion	: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get immediate medical advice/attention.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential Adverse human health effects and symptoms	: Absorption of excessive F- can result in acute systemic fluorosis with hypocalcemia, interference with various metabolic functions and organ damage (heart, liver, kidneys).
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
Symptoms/effects after inhalation	: Material is destructive to tissue of the mucuous membranes and upper respiratory tract. Cough, shortness of breath, headache, nausea.

### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically. Absorption of excessive F- can result in acute systemic fluorosis with hypocalcemia, interference with various metabolic functions and organ damage (heart, liver, kidneys).

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
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### 5.2. Specific hazards arising from the chemical

Fire hazard	: Thermal decomposition generates: Carbon oxides. Hydrogen fluoride.
Explosion hazard	: Risk of explosion if heated under confinement. Use water spray or fog for cooling exposed containers.

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### 5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.  
Protection during firefighting : Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Evacuate unnecessary personnel. Ensure adequate air ventilation. May cause suffocation by reducing oxygen available for breathing. Do not breathe gas, fumes, vapor or spray.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene.

#### 6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Gas/vapor heavier than air. May accumulate in confined spaces, particularly at or below ground level.

### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

### 6.3. Methods and material for containment and cleaning up

- For containment : Stop leak if safe to do so. Dike for recovery or absorb with appropriate material.  
Methods for cleaning up : Take up large spills with pump or vacuum and finish with dry chemical absorbent. Use explosion-proof equipment. Take up small spills with dry chemical absorbent. Sweep or shovel spills into appropriate container for disposal. Ventilate area.  
Other information : For disposal of solid materials or residues refer to section 13 : "Disposal considerations".

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Additional hazards when processed : Pressurized container: Do not pierce or burn, even after use. Close valve after each use and when empty.  
Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe fumes, gas, mist, spray, vapors. Wear personal protective equipment. Avoid contact with skin and eyes.  
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.  
Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Keep container closed when not in use. Moisture sensitive.  
Incompatible materials : Refer to Section 10 on Incompatible Materials.  
Storage area : Store in dry, cool, well-ventilated area.  
Special rules on packaging : Do not store in glass. Prolonged storage: pressure rise and possible bursting of container.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Hydrogen fluoride, anhydrous (7664-39-3)	
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Hydrogen fluoride , as F
ACGIH OEL TWA [ppm]	0.5 ppm
ACGIH OEL C [ppm]	2 ppm
Remark (ACGIH)	URT, LRT, skin, & eye irr
ACGIH chemical category	Skin - potential significant contribution to overall exposure by the cutaneous route
Regulatory reference	ACGIH 2022
<b>USA - ACGIH - Biological Exposure Indices</b>	
BEI	3 mg/g Kreatinin (Medium: urine - Time: prior to shift - Parameter: Fluoride (background, nonspecific) 10 mg/g Kreatinin (Medium: urine - Time: end of shift - Parameter: Fluoride (background, nonspecific)
<b>USA - OSHA - Occupational Exposure Limits</b>	
Local name	Hydrogen fluoride (as F)
OSHA PEL TWA [2]	3 ppm
Remark (OSHA)	(2) See Table Z-2.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
<b>USA - IDLH - Occupational Exposure Limits</b>	
IDLH [ppm]	30 ppm
<b>USA - NIOSH - Occupational Exposure Limits</b>	
NIOSH REL TWA	2.5 mg/m <sup>3</sup>
NIOSH REL TWA [ppm]	3 ppm
NIOSH REL C	5 mg/m <sup>3</sup>
NIOSH REL C [ppm]	6 ppm

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Systems under pressure should be regularly checked for leakage. Oxygen detectors should be used when asphyxiating gases may be released. Gas detectors should be used when toxic gases may be released.

#### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
protective gloves. 29 CFR 1910.138: Hand Protection
<b>Eye protection:</b>
Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection

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### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection

### Personal protective equipment symbol(s):



### Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Colorless gas. Liquid under pressure or at low temperature.
Color	: Colorless
Odor	: sharp Irritating
Odor threshold	: No data available
pH	: No data available
Melting point	: -83.7 °C
Freezing point	: No data available
Boiling point	: 19.5 °C
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: 1053 hPa (at 20 °C)
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.015 g/cm <sup>3</sup> (@ 0 °C)
Solubility	: Water: 719.8 g/l (at 20 °C)
Partition coefficient n-octanol/water (Log Pow)	: -1.4
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with water, generates gases or heat. Reacts on exposure to water with some metals to release highly explosive/flammable hydrogen gas.

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### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

Contact with acids liberates toxic gas. Contact with water liberates toxic gas.

### 10.4. Conditions to avoid

Protect from sunlight. Do not expose to temperatures exceeding 50 °C. Keep away from heat, sparks and flame.

### 10.5. Incompatible materials

Acids. Glass. Strong bases. Strong oxidizing agents. Water.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity (oral) : Fatal if swallowed.  
Acute toxicity (dermal) : Fatal in contact with skin.  
Acute toxicity (inhalation) : Fatal if inhaled. Fatal if inhaled.

#### Hydrogen fluoride, anhydrous (7664-39-3)

LC50 Inhalation - Rat	0.79 mg/l (Exposure time: 1 h)
ATE US (vapors)	0.79 mg/l/4h
Skin corrosion/irritation	: Causes severe skin burns.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Potential Adverse human health effects and symptoms	: Absorption of excessive F- can result in acute systemic fluorosis with hypocalcemia, interference with various metabolic functions and organ damage (heart, liver, kidneys).
Symptoms/effects	: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.
Symptoms/effects after inhalation	: Material is destructive to tissue of the mucuous membranes and upper respiratory tract. Cough, shortness of breath, headache, nausea.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Hydrogen fluoride, anhydrous (7664-39-3)

EC50 - Crustacea [1]	270 mg/l (Exposure time: 48 h - Species: Daphnia species)
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### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### Hydrogen fluoride, anhydrous (7664-39-3)

BCF - Fish [1]	(no bioaccumulation)
Partition coefficient n-octanol/water (Log Pow)	-1.4

### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Regional legislation (waste)	: U.S. - RCRA (Resource Conservation Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261. U.S. - RCRA (Resource Conservation Recovery Act) - U Series Wastes - Acutely Toxic Wastes Other Hazardous Characteristics.
Waste treatment methods	: Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.
Product/Packaging disposal recommendations	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	: Recycle the material as far as possible.

## SECTION 14: Transport information

### 14.1. UN number

DOT NA No	: UN1052
UN-No. (TDG)	: UN1052
UN-No. (IMDG)	: 1052
UN-No. (IATA)	: 1052

### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Hydrogen fluoride, anhydrous
Proper Shipping Name (TDG)	: HYDROGEN FLUORIDE, ANHYDROUS
Proper Shipping Name (IMDG)	: HYDROGEN FLUORIDE, ANHYDROUS
Proper Shipping Name (IATA)	: Hydrogen fluoride, anhydrous

### 14.3. Transport hazard class(es)

#### DOT

Transport hazard class(es) (DOT)	: 8 (6.1)
Hazard labels (DOT)	: 8, 6.1



#### TDG

Transport hazard class(es) (TDG)	: 8 (6.1)
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Hazard labels (TDG) : 8, 6.1



### IMDG

Transport hazard class(es) (IMDG) : 8 (6.1)

Hazard labels (IMDG) : 8, 6.1



### IATA

Transport hazard class(es) (IATA) : 8 (6.1)

## 14.4. Packing group

Packing group (DOT) : I  
Packing group (TDG) : I  
Packing group (IMDG) : I  
Packing group (IATA) : Not applicable

## 14.5. Environmental hazards

Other information : No supplementary information available.

## 14.6. Special precautions for user

### DOT

UN-No.(DOT) : UN1052  
DOT Special Provisions (49 CFR 172.102) : 3 - This material is poisonous by inhalation (see 171.8 of this subchapter) in Hazard Zone C (see 173.116(a) of this subchapter), and must be described as an inhalation hazard under the provisions of this subchapter.  
B7 - Safety relief devices are not authorized on multi-unit tank car tanks. Openings for safety relief devices on multi-unit tank car tanks shall be plugged or blank flanged.  
B46 - The detachable protective housing for the loading and unloading valves of multi-unit tank car tanks must withstand tank test pressure and must be approved by the Associate Administrator.  
B77 - Other packaging are authorized when approved by the Associate Administrator.  
N86 - UN pressure receptacles made of aluminum alloy are not authorized.  
T10 - 4 6 mm Prohibited 178.275(g)(3).  
TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.  
DOT Packaging Exceptions (49 CFR 173.xxx) : None  
DOT Packaging Non Bulk (49 CFR 173.xxx) : 163  
DOT Packaging Bulk (49 CFR 173.xxx) : 244  
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : Forbidden  
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : Forbidden

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DOT Vessel Stowage Location	: D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.
DOT Vessel Stowage Other	: 40 - Stow "clear of living quarters"

### TDG

UN-No. (TDG)	: UN1052
TDG Special Provisions	: 23 - 1) A consignor of these dangerous goods must include on a shipping document, after the classification of the dangerous goods, the words "toxic by inhalation" or "toxic – inhalation hazard" or "toxique par inhalation" or "toxicité par inhalation" if the dangerous goods meet the criteria for inclusion in Class 6.1, Packing Group I, due to inhalation toxicity. For example: CYANIDE SOLUTION, N.O.S, Class 6.1, UN1935, PG I, toxic by inhalation 2) A person must not handle, offer for transport or transport these dangerous goods by passenger carrying road vehicle, passenger carrying railway vehicle or passenger carrying ship if they meet the criteria for inclusion in Class 6.1, Packing Group I, due to inhalation toxicity. 3) This special provision does not apply to a person who transports these dangerous goods in accordance with the exemption in section 1.15 of Part 1, Coming Into Force, Repeal, Interpretation, General Provisions and Special Cases.
ERAP Index	: 1 000
Explosive Limit and Limited Quantity Index	: 0
Excepted quantities (TDG)	: E0
Passenger Carrying Ship Index	: Forbidden
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: Forbidden
Emergency Response Guide (ERG) Number	: 125

### IMDG

Limited quantities (IMDG)	: 0
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P200
Tank instructions (IMDG)	: T10
Tank special provisions (IMDG)	: TP2
EmS-No. (Fire)	: F-C - FIRE SCHEDULE Charlie - NON-FLAMMABLE GASES
EmS-No. (Spillage)	: S-U - SPILLAGE SCHEDULE Uniform - GASES (FLAMMABLE, TOXIC OR CORROSIVE)
Stowage category (IMDG)	: D
Stowage and handling (IMDG)	: SW2
Segregation (IMDG)	: SGG1A, SG36, SG49
Properties and observations (IMDG)	: Colourless, fuming and highly volatile liquid with an irritating and pungent odour. Highly corrosive to metals and glass in the presence of moisture. Boiling point: 20°C . Toxic if swallowed, by skin contact or by inhalation. Causes severe burns to skin, eyes and mucous membranes.

### IATA

PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: Forbidden
PCA max net quantity (IATA)	: Forbidden
CAO packing instructions (IATA)	: Forbidden
CAO max net quantity (IATA)	: Forbidden
Special provision (IATA)	: A2
ERG code (IATA)	: 8P

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

##### Hydrogen fluoride, anhydrous (7664-39-3)

Subject to reporting requirements of United States SARA Section 313

SARA Section 302 Threshold Planning Quantity (TPQ)	100 lb
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All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Hydrogen fluoride, anhydrous	CAS-No. 7664-39-3	100%
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#### 15.2. International regulations

##### CANADA

##### Hydrogen fluoride, anhydrous (7664-39-3)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

##### Hydrogen fluoride, anhydrous (7664-39-3)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

##### National regulations

##### Hydrogen fluoride, anhydrous (7664-39-3)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)  
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)  
Listed on the Japanese ENCS (Existing New Chemical Substances) inventory  
Listed on KECL/KECI (Korean Existing Chemicals Inventory)  
Listed on NZIoC (New Zealand Inventory of Chemicals)  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
Japanese Poisonous and Deleterious Substances Control Law  
Japanese Pollutant Release and Transfer Register Law (PRTR Law)  
Listed on INSQ (Mexican National Inventory of Chemical Substances)  
Listed on CICR (Turkish Inventory and Control of Chemicals)

#### 15.3. US State regulations

##### Hydrogen fluoride, anhydrous (7664-39-3)

State or local regulations	U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
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California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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### SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 3/30/2023

Full text of H-phrases	
H280	Contains gas under pressure; may explode if heated
H300	Fatal if swallowed
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H335	May cause respiratory irritation

NFPA health hazard

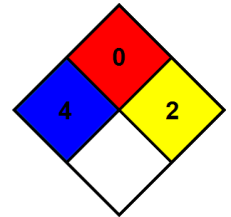
: 4 - Materials that, under emergency conditions, can be lethal.

NFPA fire hazard

: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

: 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



Hazard Rating

Health

: 4 Severe Hazard - Life-threatening, major or permanent damage may result from single or repeated overexposures

Flammability

: 0 Minimal Hazard - Materials that will not burn

Physical

: 2 Moderate Hazard - Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

Safety Data Sheet (SDS), USA

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is offered solely for your consideration, investigation, and verification. It does not represent any guarantee of the properties of the product nor that the hazard precautions or procedures described are the only ones which exist. SynQuest shall not be held liable or any damage resulting from handling or from contact with the above product.