



## Safety Data Sheet

This safety data sheet complies with the requirements of: 2012 OSHA Hazard Communication Standard ( 29CFR 1910.1200)

Product name HFC-236fa

### 1. Identification

#### 1.1. Product Identifier

Product name HFC-236fa

#### 1.2. Other means of identification

Product code 429021  
UN/ID no UN1044  
Synonyms None  
Chemical Family No information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use No information available  
Uses advised against Consumer use

#### 1.4. Details of the Supplier of the Safety Data Sheet

Company Name Tyco Fire Protection Products  
One Stanton Street  
Marinette, WI 54143-2542  
Telephone: 715-735-7411

Contact point Product Stewardship at 1-715-735-7411  
E-mail address psra@tycofp.com

#### 1.5. Emergency Telephone Number

Emergency telephone CHEMTREC 800-424-9300 or 703-527-3887

### 2. Hazards Identification

#### Classification

##### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

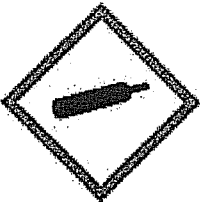
Gases Under Pressure - Compressed Gas

#### 2.2. Label Elements

Signal Word  
WARNING

#### hazard statements

Contains gas under pressure; may explode if heated





Product code 429021

Product name HFC-236fa

PAGE 2 / 8

### Precautionary Statements

#### Storage

Protect from sunlight. Store in a well-ventilated place.

### 2.3. Hazards Not Otherwise Classified (HNOC)

Simple asphyxiants. Contact with product may cause frostbite.

### 2.4. OTHER INFORMATION

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

## 3. Composition/information on Ingredients

### 3.1. Mixture

The following component(s) in this product are considered hazardous under applicable OSHA(USA).

## 4. First aid measures

### 4.1. Description of first aid measures

General Advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water. Get medical attention if irritation develops and persists.
Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. (Get medical attention immediately if symptoms occur.).
Ingestion	Rinse mouth. Do not induce vomiting without medical advice. If swallowed, call a poison control center or physician immediately.
Self-Protection of the First Aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms Unconsciousness.

### 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

Note to physicians Treat symptomatically.

## 5. Fire-fighting measures

### 5.1. Suitable Extinguishing Media

Product is extinguishing agent. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.



Product code 429021

Product name HFC-236fa

PAGE 3 / 8

**5.2. Unsuitable Extinguishing Media**

None.

**5.3. Specific Hazards Arising from the Chemical**

None known.

**Hazardous Combustion Products**

Carbon oxides, Fluorinated oxides, Nitrogen oxides (NOx), Oxides of sulfur

**5.4. Explosion Data**

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

**5.5. Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. Accidental release measures**

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

**Personal Precautions** Ensure adequate ventilation, especially in confined areas.

**OTHER INFORMATION**

Ventilate the area.

**For emergency responders**

Use personal protection recommended in Section 8.

**6.2. Environmental Precautions**

**Environmental Precautions**

Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

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

**Methods for Containment**

Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up**

Pick up and transfer to properly labeled containers.

**7. Handling and Storage**

**7.1. Precautions for Safe Handling**

**Advice on safe handling**

Avoid contact with skin and eyes. Handle in accordance with good industrial hygiene and safety practice.

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

**Storage Conditions**

Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials**

Strong oxidizing agents. Strong acids. Strong bases.

**8. Exposure Controls/Personal Protection**

**8.1. Control Parameters**



Product code 429021

Product name HFC-236fa

PAGE 4 / 8

**Exposure guidelines**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**8.2. Appropriate Engineering Controls**

**Engineering controls**

Showers  
Eyewash stations  
Ventilation systems.

**8.3. Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**

Avoid contact with eyes. Tight sealing safety goggles.

**Skin and Body Protection**

Wear protective gloves and protective clothing.

**Respiratory Protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**Ventilation**

Use local exhaust or general dilution ventilation to control exposure with applicable limits

**8.4. General hygiene considerations**

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and Chemical Properties**

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

Physical State	Compressed liquefied gas		
Odor	Characteristic	Color	Colorless
odor threshold	No data available		

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	No data available	
Evaporation Rate	No data available	
flammability (solid, gas)	No data available	
Flammability limit in air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Specific gravity	No data available	
Water Solubility	No data available	
Solubility in Other Solvents	No data available	
Partition coefficient	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Kinematic viscosity	No data available	



Product code 429021

Product name HFC-236fa

PAGE 5 / 8

## 10. Stability and Reactivity

### 10.1. Chemical Stability

Stable under recommended storage conditions.

### 10.2. Reactivity

No data available

### 10.3. Possibility of hazardous reactions

None under normal processing.

hazardous polymerization      Hazardous polymerization does not occur.

### 10.4. Conditions to Avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Oxides of sulfur. Fluorinated oxides.

## 11. Toxicological Information

### 11.1. Information on Likely Routes of Exposure

Product information

INHALATION	In high concentration the gas may cause a suffocation. Victim may not be aware of asphyxiation. In confined or poorly ventilated areas, vapors can readily accumulate and can cause unconsciousness and death.
Eye Contact	Contact with product may cause frostbite.
Skin contact	Contact with product may cause frostbite.
INGESTION	Not an expected route of exposure.

### Acute Toxicity

### 11.2. Information on Toxicological Effects

Symptoms      No information available.

### 11.3. Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization	No information available.
Germ Cell Mutagenicity	No information available
carcinogenicity	No information available.
Reproductive Toxicity	Lack of oxygen during pregnancy has produced developmental abnormalities in humans and experimental animals.



Product code 429021

Product name HFC-236fa

PAGE 6 / 8

STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Target organ effects	Respiratory System.
Aspiration Hazard	No information available.

**11.4. Numerical Measures of Toxicity - No information available**

**12. Ecological Information**

**12.1. ecotoxicity**

Not classified

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

**12.2. Persistence and Degradability**

No information available.

**12.3. Bioaccumulation**

No information available.

**12.4. Other Adverse Effects**

No information available

**13. Disposal Considerations**

**13.1. Waste Treatment Methods**

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Do not reuse container.

**14. Transport Information**

**DOT**

UN/ID no	UN1044
Description	UN1044, Fire extinguishers, 2.2
Proper Shipping Name	Fire extinguishers
Hazard class	2.2
Special Provisions	18, 110
Emergency Response Guide Number	126

**TDG**

UN/ID no	UN1044
Description	UN1044, Fire extinguishers, 2.2
Proper Shipping Name	Fire extinguishers
Hazard class	2.2

**MEX**



Product code 429021

Product name HFC-236fa

PAGE 7 / 8

UN/ID no UN1044  
Description UN1044, Fire extinguishers, 2.2  
Proper Shipping Name Fire extinguishers  
Hazard class 2.2

**ICAO (air)**

UN/ID no UN1044  
Description UN1044, Fire extinguishers, 2.2  
Proper Shipping Name Fire extinguishers  
Hazard class 2.2  
Special Provisions A19

**IATA**

UN/ID no UN1044  
Description UN1044, Fire extinguishers, 2.2  
Proper Shipping Name Fire extinguishers  
Hazard class 2.2  
ERG Code 2L  
Special Provisions A19

**IMDG**

UN/ID no UN1044  
Description UN1044, Fire extinguishers, 2.2  
Proper Shipping Name Fire extinguishers  
Hazard class 2.2  
EmS-No F-C, S-V  
Special Provisions 225

**15. Regulatory Information**

**15.1. International Inventories**

TSCA Complies  
DSL/NDSL Complies  
ENCS Complies  
IECSC Complies  
KECL Does not comply  
PICCS Does not comply  
AICS Does not comply

**Legend:**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory  
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List  
ENCS - Japan Existing and New Chemical Substances  
IECSC - China Inventory of Existing Chemical Substances  
KECL - Korean Existing and Evaluated Chemical Substances  
PICCS - Philippines Inventory of Chemicals and Chemical Substances  
AICS - Australian Inventory of Chemical Substances

**15.2. US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Acute Health Hazard No



Product code 429021

Product name HFC-236fa

PAGE 8 / 8

Chronic health hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**15.3. US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**16. Other information, including date of preparation of the last revision**

<b>NFPA</b>	Health Hazards 0	flammability 0	Instability 0	Physical and chemical properties -
<b>HMIS</b>	Health Hazards 0	flammability 0	Physical Hazards 3	Personal Protection X

Revision date 25-May-2015

Revision note  
No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet