



## 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 432893  
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  
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



#### Precautionary Statements

**Storage**

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

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

Contact with product may cause frostbite.

**2.4. OTHER INFORMATION****3. Composition/information on Ingredients****3.1. Mixture**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

| Chemical name                 | CAS No   | weight-% |
|-------------------------------|----------|----------|
| 1,1,1,3,3,3-Hexafluoropropane | 690-39-1 | 60 - 100 |

**4. First aid measures****4.1. Description of first aid measures**

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

**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 (NO<sub>x</sub>), 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****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**

|                                 |   |
|---------------------------------|---|
| <b>Eye/Face Protection</b>      | Avoid contact with eyes. Tight sealing safety goggles.  |
| <b>Skin and Body Protection</b> | Wear protective gloves and protective clothing.   |
| <b>Respiratory Protection</b>   | 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. |
| <b>Ventilation</b>              | 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**

|                       |                          |              |           |
|-----------------------|--------------------------|--------------|-----------|
| <b>Physical State</b> | Compressed liquefied gas | <b>Color</b> | Colorless |
| <b>Odor</b>           | Characteristic           |              |           |
| <b>odor threshold</b> | 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 |                         |

**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**

| Chemical name                             | Oral LD50 | dermal LD50 | Inhalation LC50        |
|---|-----------|-------------|------------------------|
| 1,1,1,3,3,3-Hexafluoropropane<br>690-39-1 | -         | -           | 914000 ppm (rat) 1 hr. |

**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.

**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 component(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

|                      |                                 |
|----------------------|---------------------------------|
| 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 |
|----------|--------|



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**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  
**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**



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**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**

|             |                  |                |                    |                                    |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <u>NFPA</u> | Health Hazards 0 | flammability 0 | Instability 0      | Physical and chemical properties - |
| <u>HMIS</u> | 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