



MATERIAL SAFETY DATA SHEET

by Tyco Fire Suppression & Building Products

FE-36

Issue Date: 03-17-2011

1. Product and Company Identification

Material name FE-36
Version # 01
Revision date 03-17-2011
CAS # 690-39-1
Product use Fire extinguishing agent
Manufacturer / Importer / Supplier
Name Tyco Fire Suppression and Building Products
Address One Stanton Street
Marinette, WI 54143-2542
Phone 715-735-7411
Internet <http://www.ansul.com>
Emergency Phone Number CHEMTREC 800-424-9300 or 703-527-3887

2. Hazards Identification

Emergency overview DANGER
Contents under pressure. Heat may cause the containers to explode.

OSHA regulatory status This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

- Eyes** Contact with liquefied gas might cause frostbites, in some cases with tissue damage.
- Skin** Contact with liquefied gas might cause frostbites, in some cases with tissue damage.
- Inhalation** Severe overexposure may cause cardiac sensitization and result in irregular rhythm. Intentional misuse by concentrating and inhaling the product can be harmful or fatal.
- Ingestion** Not a likely route of entry.

Potential environmental effects Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

Components	CAS #	Percent
1,1,1,3,3,3-HEXAFLUOROPROPANE (HFC-236FA)	690-39-1	90 - 100

4. First Aid Measures

First aid procedures

- Eye contact** Flush thoroughly with water for at least 15 minutes. Get medical assistance.
- Skin contact** Wash frost-bitten areas with plenty of water. Do not remove clothing. Get medical attention if irritation persists after washing.
- Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
- Ingestion** Not likely, due to the form of the product.

General advice If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties The product is not flammable. No unusual fire or explosion hazards noted.

Extinguishing media

- Suitable extinguishing media** This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Protection of firefighters	
Specific hazards arising from the chemical	Contents under pressure. Pressurized container may explode when exposed to heat or flame.
Specific methods	None known.

6. Accidental Release Measures

Personal precautions	None known.
Environmental precautions	No special environmental precautions required.
Methods for containment	Move the cylinder to a safe and open area if the leak is irreparable.
Methods for cleaning up	Not applicable.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling	When using do not smoke. All equipment used when handling the product must be grounded. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight.
Storage	Contents under pressure. Keep away from heat and sources of ignition. Keep at temperature not exceeding 49 °C. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Wear approved chemical safety glasses or goggles where eye exposure is reasonably probable.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	
Form	Liquefied gas.
Color	Colorless.
Odor	Odorless.
Physical state	Gas.
pH	Not available.
Melting point	-144.4 °F (-98 °C)
Freezing point	-153.4 °F (-103 °C)
Boiling point	30.2 °F (-1.4 °C)
Flash point	Not available.
Evaporation rate	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	272.4 kPa
Vapor density	Not available.
Specific gravity	1.37
Relative density	Not available.
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
VOC	Not available.

Molecular formula C3H2F6

10. Chemical Stability & Reactivity Information

Incompatible materials This product may react with strong reducing agents. and Alkaline metals.

11. Toxicological Information

12. Ecological Information

Persistence and degradability Not available.

13. Disposal Considerations

Disposal instructions This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not applicable.

14. Transport Information

DOT

Basic shipping requirements:

UN number UN3163
Proper shipping name Liquefied gas, n.o.s. (1,1,1,3,3,3-Hexafluoropropane)
Hazard class 2.2

Additional information:

ERG number 126



DOT

15. Regulatory Information

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Acute Health - No
Chronic Health - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
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.
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