



# MATERIAL SAFETY DATA SHEET

by Tyco Fire Suppression & Building Products

## NOVEC 1230

Issue Date: 09-24-2010

### 1. Product and Company Identification

**Material name** NOVEC 1230  
**Version #** 01  
**Revision date** 09-24-2010  
**CAS #** 756-13-8  
**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** Health injuries are not known or expected under normal use.  
**OSHA regulatory status** This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).  
**Potential health effects**  
**Routes of exposure** Eye contact. Skin contact. Inhalation. Ingestion.  
**Eyes** None known.  
**Skin** None known.  
**Inhalation** None known. Do not breathe vapor.  
**Ingestion** None known. Not a likely route of entry.  
**Potential environmental effects** Ecological injuries are not known or expected under normal use.

### 3. Composition / Information on Ingredients

Non-hazardous components	CAS #	Percent
1,1,1,2,2,4,5,5,5-nonafluoro-4-(trifluoromethyl)-3-pentanone	756-13-8	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** Rinse with water.  
**Inhalation** Remove to fresh air. If symptoms persist, get medical attention.  
**Ingestion** No adverse effects due to ingestion are expected.  
**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.

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## 6. Accidental Release Measures

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**Personal precautions** Local authorities should be advised if significant spillages cannot be contained.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods for containment** Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

**Methods for cleaning up** Should not be released into the environment.

Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece).

Never return spills in original containers for re-use. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination.

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## 7. Handling and Storage

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**Handling** Avoid breathing mist or vapor. Handle and open container with care.

**Storage** Contents under pressure. Keep away from heat and sources of ignition. Store in a well-ventilated place.

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## 8. Exposure Controls / Personal Protection

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### Personal protective equipment

**Eye / face protection** Not normally needed.

**Skin protection** No special protective equipment required.

**Respiratory protection** No personal respiratory protective equipment normally required.

**General hygiene considerations** Handle in accordance with good industrial hygiene and safety practice.

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## 9. Physical & Chemical Properties

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### Appearance

**Form** Liquid.

**Color** Colorless.

**Odor** Odorless.

### Physical state

Liquid.

### pH

Not available.

### Melting point

-162.4 °F (-108 °C)

### Freezing point

Not available.

### Boiling point

120.2 °F (49 °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

244 mm Hg

### Vapor density

11.6

### Specific gravity

1.6

### Relative density

Not available.

### Solubility (water)

not soluble

### Partition coefficient (n-octanol/water)

Not available

### Auto-ignition temperature

Not available.

### Decomposition temperature

Not available.

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VOC	Not available.
Viscosity	0.6 cP
Molecular formula	C6F12O

## 10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Ultraviolet light. Sunlight.
Hazardous decomposition products	No hazardous decomposition products are known.

## 11. Toxicological Information

Chronic effects	None known.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
Further information	This product has no known adverse effect on human health.

## 12. Ecological Information

Ecotoxicity	This product has no known eco-toxicological effects.
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.
Contaminated packaging	Not applicable.

## 14. Transport Information

### DOT

Not regulated as dangerous goods.

## 15. Regulatory Information

US federal regulations	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.  CERCLA/SARA Hazardous Substances - Not applicable.
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### 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
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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)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
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)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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)

**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

## 16. Other Information

<b>Further information</b>	HMIS® is a registered trade and service mark of the NPCA.
<b>HMIS® ratings</b>	Health: 0 Flammability: 0 Physical hazard: 0
<b>NFPA ratings</b>	Health: 0 Flammability: 0 Instability: 0
<b>Disclaimer</b>	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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