



MATERIAL SAFETY DATA SHEET

Section 1 – PRODUCT AND SAFETY SUPPLIER INFORMATION

Product Name: 3M Novec Engineered Fluid HFE-7100
Common Name: HFE-7100 #m Novec Engineered Fluid
Supplier: Lightning Powder Company, Inc.
13386 International Parkway, Jacksonville, FL 32218
Emergency Telephone: Chemtel® United States (800) 255-3924 International – 813-248-0585 (Collect)
Date Prepared: November 8, 2002

Section 2 – HAZARDOUS INGREDIENTS

<u>Ingredient</u>	<u>CAS#</u>	<u>Percent</u>	<u>PEL (OSHA)</u>	<u>TLV (ACGIH)</u>
Methyl Nonafluoro- isobutyl Ether	163702-08-7	50-70	750 ppm	750 ppm
Methyl Nonafluoro- butyl Ether	163702-07-6	30-50	750 ppm	750 ppm

Section 3 – PHYSICAL/CHEMICAL PROPERTIES

Appearance and Odor: Clear, colorless liquid with slight ethereal odor.
Specific Gravity: 1.5 Stability in Water: < 12 ppm solubility
Boiling Point: 61 Deg. C Melting Point: -135 Deg. C
Vapor Density: 8.6 Vapor Pressure (mmHg): 202
Evaporation Rate: 49 Percent Volatile: 100

Section 4 – FIRE AND EXPLOSION DATA

Flash Point: None UEL: None LEL: None
Extinguishing Media: Product is nonflammable.
Firefighting Procedures: Wear SCBA if surrounding fire is so severe that thermal decomposition of product is occurring.
Unusual Fire and Explosion Hazards: Exposure to extreme heat can give rise to thermal decomposition.



Section 10 – TOXICOLOGICAL DATA

Carcinogenicity:

NPT: No

OSHA: No

IARC: No

Acute Inhalation LC50: > 100,000 ppm (rat, 4-hour)

Acute Dermal LD50: Not a significant route of exposure.

Acute Oral LD50: 5g/kg (rat)

Section 11 – ECOLOGICAL DATA

Zereo ozone depletion potential.

> 7.9 mg/l LC50 for flathead minnow @ 96 hours.

> 10 mg/l EC50 for water flea @ 48 hours.

> 8.9 mg/l ErC50 for algae @ 96 hours.

Section 12 – TRANSPORTATION IDENTIFICATION

Proper Shipping Name: Not regulated

Identification Number: n/a

Hazard Class: n/a

Packing Group: n/a