



Chemicals Americas, Inc.

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** FLUON TL-5  
**Product Code:** 611005100  
**Trade Name:** FLUON  
**Chemical Characterization:** Powdered or granular PTFE mixture

**Supplier:**  
AGC Chemicals Americas, Inc.  
229 East 22nd Street  
Bayonne, NJ 07002

### 24 Hr. Emergency Telephone Numbers

CHEMTREC (US) (800) 424-9300 24 hours  
MEDICAL EMERGENCY: (800) 420-8479  
Transportation Phone (800) 424-9300  
Customer Service (800) 424-7833

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components (CAS#)	Wt. %	ACGIH TLV:	OSHA PEL:	Ceiling Limit Value:
Polytetrafluoroethylene 9002-84-0	90 - 100	None	None	None

See additional exposure information in Section 8.

## 3. HAZARDS IDENTIFICATION

**NFPA Rating:** Health: 2, Flammability: 1, Reactivity: 0

**HMIS Classification:** Health: 2, Flammability: 1, Reactivity: 0

**Emergency Overview:** Dust from this product may be harmful if inhaled. High-heat processing may liberate toxic gases. See sections 4, 5 and 10 for more information on thermal decomposition products.

### Potential Health Effects:

**Skin Contact:** Generally does not cause skin irritation.  
**Eye Contact:** May cause irritation to the eyes due to mechanical abrasion of particles.  
**Ingestion:** Ingestion may cause irritation to the gastrointestinal tract.  
**Inhalation:** High concentrations of airborne dust may cause irritation to the respiratory tract.  
**Medical Conditions Aggravated by Exposure:** None known

## 4. FIRST AID MEASURES

**Inhalation:** Move to fresh air and monitor for symptoms. If cough or irritation develops, give a glass of water. Never give anything by mouth to an unconscious person. If symptoms persist seek medical attention.

**Skin Contact:** Wash material from the skin with plenty of soap and water.

**Ingestion:** If person is conscious, rinse mouth with water. Never give anything by mouth to

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06/08/2005

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MARKETED BY

**HARWICK STANDARD  
DISTRIBUTION CORPORATION**

60 S. Seiberling Street • Akron, Ohio 44305

**Eye Contact:** an unconscious person.  
Flush eyes with plenty of water while holding eyelids open.

**Notes to Physician:** High heat processing of this product liberates thermal decomposition gases, which when inhaled can result in polymer fume fever. This condition is characterized by influenza type symptoms (fever, cough and malaise), which usually occurs within a few hours and resolves within 48 hours. Following severe exposure the patient should be kept under medical surveillance for at least 48 hours since delayed pulmonary edema may develop.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Use media suitable for surrounding fire. Product does not support combustion or flame

**Unusual Fire and Explosion Hazards:** None known

**Hazardous Decomposition Products:** See Section 10.

**Flash Point (°F):**

**Autoignition Temperature (°F):** Not applicable

**Flammable Limits in Air**

**Lower (%):** Not applicable

**Upper (%):** Not applicable

**Special Protective Equipment for Firefighters:** Wear a self-contained breathing apparatus (SCBA) to prevent inhalation of toxic thermal decomposition products.

**Specific Methods:** Evacuate area and restrict access to area. Use fire fighting methods suitable for surrounding fire. This product does not readily burn. Keep containers cool with water spray if possible.

## 6. ACCIDENTAL RELEASE MEASURES

**Containment Techniques:** Restrict area where spill occurred. Tarp spilled material if outdoors to prevent wind dispersion until clean up can occur.

**Environmental Protection:** No special environmental precautions required.

**Methods for Cleaning Up:** Refer to Section 8 for exposure controls. Restrict area. Ensure adequate ventilation. Gently sweep or vacuum spilled material and collect for disposal. Mop or wipe residual from surface using water.

## 7. HANDLING AND STORAGE

**Safe Handling Precautions:** Avoid creating dust and heating above 260 °C (PTFE). If these conditions cannot be avoided, use adequate ventilation to capture dust or decomposition products at the source.

**Safe Storage Conditions:** Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible Products:** None known

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Controls:** Provide local exhaust ventilation in your process to capture dust or thermal decomposition gases at their source. Refer to the ACGIH Guide to Industrial Ventilation for design assistance.

**Personal Protective Equipment Respiratory Protection:** Wear a NIOSH approved air-purifying respirator when needed to maintain dust

exposures below the limits found in Section-2. Series-100 or HEPA filters are recommended. NOTE: A supplied-air respirator or self-contained breathing apparatus (SCBA) must be used to protect against thermal decomposition products.

**Hand Protection:** Rubber gloves

**Skin and Body Protection:** Wear full-length work clothes to prevent skin contact. Launder on a routine basis. Do not bring work clothes home.

**Eye Protection:** Wear tightly-fitting safety goggles in a dusty environment.

**Hygiene Measures:** Avoid contact with skin, eyes and personal clothing. Do not contaminate tobacco products. Wash hands thoroughly before eating.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical State:** Solid  
**Appearance:** Powder  
**Color:** White  
**Odor:** None  
**Ph:** Neutral to slightly acidic in nature.  
**Boiling Point/Range:** Not applicable  
**Melting Point/Range:** 320 - 345 C  
**Specific Gravity:** 2.14-2.18  
**Bulk Density:** 300-600 grams/liter  
**Solubility in Water:** Insoluble  
**Solubility in Other Solvents:** Insoluble in all common solvents.

**10. STABILITY AND REACTIVITY**

**Stability:** Stable up to 380 °C measured as the temperature of the polymer (PTFE).  
**Polymerization:** None under normal processing.  
**Hazardous Decomposition Products:** Heated above 400 Deg C (750 F) can evolve as degradation products of Hydrofluoric Acid and Carbonyl Fluoride (from 400 Deg C), Tetrafluoroethylene (from 430 Deg C), Hexafluoropropylene (from 440 Deg C), Perfluoroisobutylene (from 470 Deg C)  
**Materials to Avoid:** Reacts with molten alkali metals and finely divided magnesium and aluminum at temperatures above 425 Deg. C  
**Conditions to Avoid:** Avoid temperatures above 380 °C. Continuous use temperature should not exceed 260 °C. (PTFE)

**11. TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY AND SKIN DESIGNATION**

Components (CAS#)	Wt. %	NIOSH - Selected LD50s & LC50s	ACGIH 2000 - Skin Absorption Designation
Polytetrafluoroethylene 9002-84-0	90 - 100	= 45 mg/m <sup>3</sup> Inhalation LC50 Rat 30 min	No Data Available

**CHRONIC TOXICITY**

**Carcinogenic effects:** No data is available on the product itself, however the monomer used to produce FEP, Tetrafluoroethylene, is known to the state of California to cause cancer.  
**Mutagenic effects:** No data is available on the product itself.  
**Reproductive toxicity:** No data is available on the product itself.



## Carcinogenic Status

Components (CAS#)	Wt. %	IARC Carcinogens	ACGIH 1999 - Carcinogens	OSHA - Select Carcinogens	NTP Eighth Report - Known Carcinogens
Polytetrafluoroethylene 9002-84-0	90 - 100	Not Listed	Not Listed	Not Listed	Not Listed

## 12. ECOLOGICAL INFORMATION

**Mobility:** The product is insoluble and sinks in water.

### **Polytetrafluoroethylene 90 - 100 9002-84-0** **Clean Water Act - Bioaccumulative Chemical**

No data available

#### **Ecotoxicity - Microtox Data**

No data available

#### **Ecotoxicity - Aquatic Toxicity Data**

No data available.

## 13. DISPOSAL CONSIDERATIONS

### **Waste from residues / unused products:**

Dispose of in accordance with federal, state and local regulations. This product is not a hazardous waste under RCRA, 40 CFR 261 in its original form. If this product is mixed with other materials and/or physically changed, it should be evaluated to assure that the resulting mixture/material does not meet the criteria for listing hazardous waste as specified in 40 CFR 261.11.

### **Contaminated packaging:**

Empty containers should not be used for materials other than the original product. A qualified drum management or solid waste disposal contractor should be used to assure proper handling of empty containers.

## 14. TRANSPORT INFORMATION

Not regulated by the DOT as hazardous material as determined in 49 CFR 172.

## 15. REGULATORY INFORMATION

### **CHEMICAL INVENTORIES STATUS**

<b>TSCA (United States):</b>	Listed.
<b>DSL (Canada):</b>	Listed.
<b>NDSL (Canada):</b>	Listed.
<b>EINECS (Europe):</b>	Listed.
<b>ELINCS (Europe):</b>	Listed.
<b>JENCS (Japan):</b>	Listed.
<b>PICCS (Philippines):</b>	Not Listed.

### CALIFORNIA - PROP 65 REGULATIONS

Components (CAS#)	Wt. %	California - Proposition 65
Polytetrafluoroethylene 9002-84-0	90 - 100	Not Listed

### STATES RIGHT-TO-KNOW LISTS

Components (CAS#)	Wt. %	Pennsylvania Right to Know List:	New Jersey Right-to-Know List:
Polytetrafluoroethylene 9002-84-0	90 - 100	Present	Not Listed.

### CLEAN AIR ACT REGULATIONS

Components (CAS#)	Wt. %	Accidental Release Prevention - Flammable Substances	Accidental Release Prevention - Toxic Substances	1990 Hazardous Air Pollutants
Polytetrafluoroethylene 9002-84-0	90 - 100	Not Listed.	Not Listed.	Not Listed.

### TSCA & CERCLA/SARA REGULATIONS

Components (CAS#)	Wt. %	TSCA - Sect. 5(a)(2) - Chemicals with SNUR	Section 313 - Emission Reporting	Section 302 - Hazardous Substances	Section 302 - EHS & TPQs
Polytetrafluoroethylene 9002-84-0	90 - 100	Not Listed.	Not Listed.	Not Listed.	Not Listed.

<b>Sara Classification:</b>		Not Classified.
<b>Components (CAS#)</b>	<b>Wt. %</b>	<b>Canadian DSL and NDSL Listing</b>
Polytetrafluoroethylene 9002-84-0	90 - 100	on DSL

## **16. OTHER INFORMATION**

This data sheet contains changes from the previous version in section(s):  
None

**Additional advice:**

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**Effective Date:** 06/08/2005

No additional informations.

**Prepared by:** AGFP Research and Technical Department

**Disclaimer:**

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**End of safety data sheet**