



AGC Chemicals Americas, Inc.

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product Name:** FLUON FL1650

**Product Code:** 611165400

**Trade Name:** Fluon

**Chemical Characterization:** Powdered or granular PTFE mixture

**Supplier:** AGC Chemicals Americas, Inc.  
55 E. Uwchlan Avenue  
Suite 201  
Exton, PA 19341

**24 Hr. Emergency Telephone Numbers**  
CHEMTREC (US): (800) 424-9300; MEDICAL EMERGENCY: (800) 420-8479  
Transportation Phone: (800) 424-9300; Customer Service: (800) 424-7833

**2. 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:**

**Inhalation:** High concentrations of airborne dust may cause irritation to the respiratory tract.

**Ingestion:** Ingestion may cause irritation to the gastrointestinal tract.

**Eye Contact:** May cause irritation to the eyes due to mechanical abrasion of particles.

**Skin Contact:** Generally does not cause skin irritation.

**Medical Conditions Aggravated by Exposure:** None known

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component Name	CAS-NO	Weight %	ACGIH TLV:	OSHA PEL:	Ceiling Limit:
PTFE	9002-84-0	100%	None	None	None

**Notes:**  
See additional exposure information in Section 8.

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#### 4. FIRST AID MEASURES

<b>Inhalation:</b>	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.
<b>Skin Contact:</b>	Wash material from the skin with plenty of soap and water.
<b>Eye Contact:</b>	Flush eyes with plenty of water while holding eyelids open.
<b>Ingestion:</b>	If person is conscious, rinse mouth with water. Never give anything by mouth to an unconscious person.
<b>Notes to Physician:</b>	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

<b>Suitable Extinguishing Media:</b>	Use media suitable for surrounding fire. Product does not support combustion or flame
<b>Unusual Fire and Explosion Hazards:</b>	None known
<b>Hazardous Decomposition Products:</b>	See Section 10.
<b>Flash Point (°F):</b>	Not applicable
<b>Flash Point (°C):</b>	Not applicable
<b>Autoignition Temperature (°F):</b>	Not applicable
<b>Flammable Limits in Air</b>	
<b>Lower (%):</b>	Not applicable
<b>Upper (%):</b>	Not applicable
<b>Firefighter Protective Equipment:</b>	Wear a self-contained breathing apparatus (SCBA) to prevent inhalation of toxic thermal decomposition products.
<b>Specific Methods:</b>	Evacuate area and restrict access to area. Use fire fighting methods suitable for surrounding fire. product does not readily burn. Keep containers cool with water spray if possible.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Containment Techniques:</b>	Restrict area where spill occurred. Tarp spilled material if outdoors to prevent wind dispersion until clean up can occur.
<b>Environmental Protection:</b>	No special environmental precautions required.
<b>Methods for Cleaning Up:</b>	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.

**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.

**Hand Protection:** Rubber gloves

**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.

**Exposure Limit** Particulates (Not Otherwise Regulated) with the following generic exposure limits: OSHA PEL: 15 mg/m<sup>3</sup> (total dust), 5 mg/m<sup>3</sup> (respirable fraction).

**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.

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

**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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Powder or granular material	<b>Physical State:</b>	Solid
<b>Color:</b>	Not applicable	<b>Odor:</b>	Not applicable
<b>Flash Point (°F):</b>	Not applicable	<b>Boiling Point/Range:</b>	Not applicable
<b>Melting Point/Range:</b>	Not applicable	<b>Vapor Pressure:</b>	Not applicable
<b>Vapor Density:</b>	Not applicable	<b>Solubility in Water:</b>	Insoluble
<b>Solubility in Other Solvents:</b>	Insoluble in all common solvents.		

**10. STABILITY AND REACTIVITY**

**Stability:** Decomposes in open air or in nitrogen above 400 °C

**Conditions to Avoid:** To avoid thermal decomposition, do not overheat.

**Materials to Avoid:** Reacts with molten alkali metals and finely divided magnesium and aluminum at temperatures above 425 Deg. C

**Hazardous Decomposition Products:** Thermal decomposition of this product (at temperatures above 300C.) will generate hydrogen fluoride, which is corrosive.

**Polymerization:** None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY AND SKIN DESIGNATION

Component Name	CAS-NO	NIOSH - Selected LD50s & LC50s	ACGIH 2000 - Skin Absorption Designation
PTFE	9002-84-0	= 45 mg/m <sup>3</sup> Inhalation LC50 Rat 30 min	No Data Available

### CHRONIC TOXICITY

**Carcinogenic effects:** 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

Component Name	IARC Carcinogens	ACGIH 1999 - Carcinogens	OSHA - Select Carcinogens	NTP Eighth Report - Known Carcinogens
PTFE	Not Listed	Not Listed	Not Listed	Not Listed

## 12. ECOLOGICAL INFORMATION

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

## 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

### U.S. Department of Transportation DOT - Substances From 49 CFR 172.101

**DOT Classification:** Not regulated

### Air transport

#### ICAO/IATA

**DOT Classification:** Not regulated

## 15. REGULATORY INFORMATION

### CALIFORNIA - PROP 65 REGULATIONS

Component Name	CAS-NO	California - Proposition 65
PTFE	9002-84-0	Not Listed

### CLEAN AIR ACT REGULATIONS

Component Name	Accidental Release Prevention - Flammable Substances	Accidental Release Prevention - Toxic Substances	1990 Hazardous Air Pollutants	Section 302 EHS & TPQs	Section 313 Emission Reporting	Section 302 Hazardous Substances
PTFE	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed.	Not Listed.

### CHEMICAL INVENTORIES STATUS

Component Name	TSCA (United States):	EINECS (Europe):	JENCS (Japan):	PICCS (Philippines):	Canadian DSL and NDSL Listing
PTFE	Listed	Listed	Listed	Listed	on DSL

Restricted or Prohibited in Electrical Equipment (2002/95/EC) This product complies with EU RoHS

### STATES RIGHT-TO-KNOW LISTS

Component Name	New Jersey Right-to-Know List:	Pennsylvania Right to Know List:
PTFE	Not Listed.	Not Listed.

### TSCA & CERCLA/SARA REGULATIONS

Sara Classification: Not Classified.

Component Name	TSCA - Sect. 5(a)(2) - Chemicals with SNUR
PTFE	Not Listed

## 16. OTHER INFORMATION

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

**Additional advice:** Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

**Prepared by:** AGCCA Research & Development

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End of safety data sheet

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