



Material Safety Data Sheet

NFPA 	HMIS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	Personal Protective Equipment  See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name	Polytetrafluoroethylene	
	Catalog Number(s).	P2842
	CAS#	9002-84-0
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	RTECS	KX4025000
	TSCA	TSCA 8(b) inventory: Polytetrafluoroethylene
Commercial Name(s)	PTFE; Aflon; Algloflon; Chromosorb T; Fluon; Fluo-kem; Fluoroflex; Fluoroplast 4; Halon G 80; Heydeflon; Polifen; Politef; Tarflen; Teflon;	
	CI#	Not available.
Synonym	Poly(ethylene tetrafluoride); Polytetrafluoroethene; Tetrafluoroethene polymer; Tetrafluoroethylene homopolymer	
Chemical Name	Ethene, tetrafluoro-, homopolymer	
Chemical Family	Not available.	
Chemical Formula	(CF ₂ CF ₂) _n	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Polytetrafluoroethylene	9002-84-0				100
Toxicological Data on Ingredients	Not applicable.				

Section 3. Hazards Identification	
Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact	Not available.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7. Handling and Storage

Precautions Do not breathe dust. Keep away from incompatibles such as oxidizing agents.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits TWA: 2.5 (mg/m³) [Canada]
Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Powdered solid.)	Odor	Not available.
Molecular Weight	Not available.	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	White.
Boiling Point	>400°C (752°F)		
Melting Point	327°C (620.6°F)		
Critical Temperature	Not available.		
Specific Gravity	2 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water.		

Section 10. Stability and Reactivity Data

Stability The product is stable.

Instability Temperature Not available.

Conditions of Instability Incompatible materials, dust generation.

Incompatibility with various substances Reactive with oxidizing agents.

Corrosivity Not available.

Special Remarks on Reactivity Incompatible with sodium-potassium alloy in a helium atmosphere.
Incompatible with fluorine-oxygen mixtures.

Special Remarks on Corrosivity Not available.

Polymerization Will not occur.

Section 11. Toxicological Information

Routes of Entry Inhalation. Ingestion.

Toxicity to Animals LD50: Not available.
LC50: Not available.

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** 3 (Not classifiable for human.) by IARC.

Other Toxic Effects on Humans Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals Not available.

Special Remarks on Chronic Effects on Humans May cause cancer based on animal test data.

Special Remarks on other Toxic Effects on Humans
Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: Dust may cause eye irritation.
Inhalation: Inhalation of dust may cause respiratory tract irritation, cough. Inhalation of fumes may cause respiratory tract irritation, cough, shortness of breath, elevated temperature, pulmonary edema.
Ingestion: Expected to be a low hazard.
Chronic Potential Health Effects:
Inhalation: Prolonged or repeated inhalation of fumes may affect the kidneys and cause thrombosis.
Exposure to fumes (thermodegradation products) may also cause influenza-like symptoms such as chills, headache, mild respiratory discomfort, shaking of limbs, and high fever.

Section 12. Ecological Information

Ecotoxicity Not available.

BOD5 and COD Not available.

Products of Biodegradation Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation Not available.

Section 13. Disposal Considerations

Waste Disposal Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations

Rhode Island RTK hazardous substances: Polytetrafluoroethylene
 Pennsylvania RTK: Polytetrafluoroethylene
 Minnesota: Polytetrafluoroethylene
 TSCA 8(b) inventory: Polytetrafluoroethylene

California Proposition 65 Warnings

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations

EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
 Canada: Listed on Canadian Domestic Substance List (DSL).
 China: Listed on National Inventory.
 Japan: Listed on National Inventory (ENCS).
 Korea: Listed on National Inventory (KECI).
 Philippines: Listed on National Inventory (PICCS).
 Australia: Listed on AICS.


Other Classifications

WHMIS (Canada) Not controlled under WHMIS (Canada).
DSCL (EEC) This product is not classified according to the EU regulations. Not applicable.

HMIS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	E

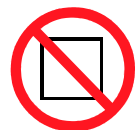
National Fire Protection Association (U.S.A.)

Health  Flammability
 Reactivity
 Specific hazard

WHMIS (Canada) (Pictograms)



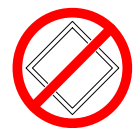
DSCL (Europe) (Pictograms)






TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment

-  Gloves.
-  Lab coat.
-  Dust respirator. Be sure to use an approved/certified respirator or equivalent.

Safety glasses.

**Section 16. Other Information****MSDS Code** ZQ475**References** Not available.**Other Special Considerations** Major Uses: Lining reaction vessels; gaskets and pump packings; electrical insulator; filtration fabrics; protective clothing; in mechanical tapes and glass fibers; in cable connectors, circuit breakers, and stand-off insulators; seals, piston rings, and bearings; polymer for rods, sheets, and fibers, and impregnated fabrics; polymer for parts used in handling liquids.

Validated by Sonia Owen on 7/15/2009.

Verified by Sonia Owen.

Printed 7/15/2009.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.