



SAFETY DATA SHEET Polyflon PTFE D Series

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

DAIKIN TRADE NAME:	Polyflon PTFE D Series
	D-210
FEATURE AND APPLICATION:	Non-stick and/or chemical resistant coatings
CHEMICAL FAMILY:	Fluorocarbon Polymer Dispersion
COMPANY:	Daikin America, Inc. 20 Olympic Drive
	Orangeburg, New York 10962
EMERGENCY PHONE:	1-256-306-5000
PRODUCT INFORMATION:	1-800-365-9570 (9 am to 5 pm Eastern Standard Time)

SECTION 2: HAZARD IDENTIFICATION

GHS CLASSIFICATION:	Eye Irritation, Category 2B		
	Mild Skin Irritation – Not Classified		
	Acute Toxicity – Classification Not Possible Respiratory Sensitization – Classification Not Possible Skin Sensitization – Not Classified		
GHS LABEL REQUIREMENTS:	Symbol –	None	
	Signal Word -	Warning	
	Hazard Statement(s) -	H320 - Causes eye irritation	
	Precautionary Statement(s) -	- P264 – Wash hands thoroughly after handling	
		P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
		P337+P313 – If eye irritation persists: Get medical attention.	
OTHER HAZARDS:	The fluoropolymer contained in this product in its raw form is nearly inert. Processing above 350 °C, may produce hydrogen fluoride and other toxic fluorinated compounds. Inhalation of these compounds may result in serious lung irritation. Inhalation of vapors and fumes may cause flu-like symptoms (e.g., chills, fever, cough) that may not occur until several hours after exposure and typically pass within about 36 to 48 hours.		
OTHER HAZARDS:	above 350 °C, may produce I Inhalation of these compound and fumes may cause flu-like	P337+P313 – If eye irritation persists: Get medical att d in this product in its raw form is nearly inert. Process hydrogen fluoride and other toxic fluorinated compoun ds may result in serious lung irritation. Inhalation of va e symptoms (e.g., chills, fever, cough) that may not occu	

SECTION 3: INFORMATION ON INGREDIENTS			
COMPONENT	CAS NO.	Wt%	
Polytetrafluoroethylene	9002-84-0	55 to 61	
Water	7732-18-5	23 to 40	
Tridecyl Alcohol Ethoxylate	24938-91-8	3 to 5	

SECTION 4. FIRST AID MEASURES

INGESTION:Consult a physician immediately.EYE CONTACT:Flush with large amounts of water for 10-15 minutes. Consult a physician if needed.SKIN CONTACT:Wash affected area with soap and water. Remove contaminated clothing.INHALATION:Leave the contaminated area and seek fresh air. If breathing is difficult, contact a physician.

SECTION 5. FIRE FIGHTING MEASURES		
EXTINGUISHING MEDIA:	Alcohol foam, CO ₂ , dry chemical or water spray	
PROTECTIVE EQUIPMENT:	Use NIOSH/MSHA approved SCBA and bunker gear. Evolution of acidic gases may require complete wash down of protective clothing prior to removal.	
HAZARDOUS COMBUSTION PRODUCTS:	In case of fire or if processing at high temperatures, toxic gases including hydrofluoric acid, perfluoroisobutylene, and carbonyl fluoride may be formed.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Ensure cleanup is done only by trained personnel wearing appropriate personal protective equipment.

Ventilate area and cover with absorbent material.

Collect spilled material in a container and seal.

Do not allow to enter sewer, surface or ground water.

Spilled material is a slipping hazard.

SECTION 7. HANDLING & STORAGE

HANDLING

Use product only for intended purpose.

Close containers after each use.

Wash hands after handling.

If smoking tobacco becomes contaminated by this material, exposure to toxic gases through inhalation can occur.

Therefore, do not smoke in the work areas and wash hands and face after handling in order to avoid transfer of material onto tobacco.

Do not allow material to be exposed to excessive heat (e. g., from use of torch, welding, etc).

Provide good room ventilation.

STORAGE

Store material at 5 °C (40 °F) to 25 °C (77 °F)

Keep away from heat, steam or sunlight.

Store in a tightly closed container.

If material is stored for a long period of time, the container must be tumbled or rolled at 25 °C in order to cause redispersion at least once every two weeks.

SECTION 8. EXPOSURE CONTROLS & PERSONAL PR	ROTECTIVE EQUIPMENT
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EXPOSURE LIMITS:	No exposure limits available for the product.
	Excessive exposure to thermal degradation products could result in delayed pulmonary edema in some cases, and on very high exposure, damage to the liver and kidneys. These substances may include: perfluoroisobutylene (TLV = 10 ppb), carbonyl fluoride (TLV = 2 ppm TWA, 5 ppm STEL), hydrogen fluoride (TLV = 2 ppm Ceiling, 0.5 ppm TWA).
RESPIRATORY PROTECTION:	Use respirator for acidic gases/oily particulates where aerosol/mists may be generated. If material is heated above 350 °C, use a respirator for acidic gases.
EYE PROTECTION:	Safety glasses with side shields or goggles
PROTECTIVE CLOTHING:	Impervious clothing, boots, and gloves should be worn when handling this material.

OTHER PROTECTIVE EQUIPMENT:

Use local exhaust ventilation if material is heated above 350 $^{\circ}\mathrm{C}$ or if spraying or coating.

Eyewash station and safety shower.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES		
APPEARANCE:	Milky-white dispersion	
ODOR:	Ammonia type odor	
ODOR THRESHOLD:	Not Available	
рН:	8 to 11	
MELTING POINT:	332 ~ 352 °C	
BOILING POINT/RANGE:	Not Available	
FLASH POINT:	Non-flammable	
FLAMMABLE LIMITS:	LEL – None	
	UEL - None	
EVAPORATION RATE (Butyl acetate=1):	Not Available	
VAPOR PRESSURE:	Same as Water	
VAPOR DENSITY:	Same as Water	
SPECIFIC GRAVITY (H₂O=1):	1.50 ~ 1.53 at approximately 25 °C	
APPARENT DENSITY:	Not Applicable	
SOLUBILITY(IES):	Soluble	
PARTITION COEFFICIENT (n-octanol/water):	Not Available	
AUTO-IGNITION TEMPERATURE:	Not Applicable	
DECOMPOSITION TEMPERATURE:	376 °C (1 ppb TGA)	
VISCOSITY:	Not Applicable	
AVERAGE PARTICLE SIZE:	Not Applicable	

SECTION 10. STABILITY & REACTIVITY

STABILITY:	Stable
CONDITIONS TO AVOID:	Excessive heat – material will decompose.
INCOMPATIBILITIES:	May react with metals, such as sodium, magnesium, aluminum, at elevated temperatures above 425 °C; may react upon prolonged exposure to fluorine or in oxygen-fluorine mixtures at high temperature and pressures. Contact with incompatible materials may result in fire or explosion.
HAZARDOUS POLYMERIZATION:	Should not occur
HAZARDOUS DECOMPOSITION:	Decomposition or by-products and toxic by-products including hydrofluoric acid, perfluoroisobutylene, and carbonyl fluoride may be formed at very high temperatures.

SECTION 11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS OF	FEXPOSURE	
Ingestion:	May be harmful if swal	lowed
Eye Contact:	May cause eye irritation	n
Skin Contact:	May cause slight irritat	ion
Inhalation:	When thermally decom	posed, this material can cause polymer fume fever.
CHRONIC EFFECTS	OF EXPOSURE:	No Data Available
ACUTE TOXICITY:		No Data Available
SKIN CORROSION/I	RRITATION:	No Data Available
SERIOUS EYE DAMA	AGE/IRRITATION:	No Data Available
RESPIRATORY OR S	SKIN SENSITIZATION:	No Data Available
GERM CELL MUTA	GENICITY:	No Data Available
CARCINOGENICITY		None of the components in this material are listed by NTP, OSHA or IARC.
REPRODUCTIVE TO	XICITY:	No Data Available
STOT-SINGLE EXPO	SURE:	No Data Available
STOT-REPEATED EX	KPOSURE:	No Data Available
ASPIRATION HAZAI	RD:	Not Applicable
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SECTION 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY:

No data

No data

BIOACCUMULATION:

SECTION 13. DISPOSAL CONSIDERATIONS

Comply with Federal, State and Local regulations concerning health and environment when disposing of materials. Regulations may also apply to empty containers, liners, or rinsate. DO NOT INCINERATE unless incinerator is capable of scrubbing hydrogen fluoride and other acidic combustion products.

SECTION 14. TRANSPORT INFORMATION

UN CLASSIFICATION:	Not applicable
DOT HAZARD DESCRIPTION:	Not applicable
CANADIAN TRANSPORTATION OF	
DANGEROUS GOODS (TDG):	Not applicable

SECTION 15. REGULATORY INFORMATION

SECTION 15. RECUEAT	
TSCA:	All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.
California Proposition 65:	This product does not contain intentionally added (meaning deliberate use in the formulation of a product or subpart where its continued presence is desired to provide a specific characteristic, appearance or quality) materials which are listed on the California Proposition 65 list.
REACH SVHC:	This product does not contain intentionally added (meaning deliberate use in the formulation of a product or subpart where its continued presence is desired to provide a specific characteristic, appearance or quality) materials which are listed on the REACH Substances of Very High Concern (SVHC) list.
RoHS:	This product does not contain intentionally added lead, mercury, cadmium, PBB (polybrominated biphenyl) or PBDE (polybrominated diphenyl ether); unintentionally added (trace) amounts of lead, mercury, hexavalent chromium, PBB (polybrominated biphenyl), or PBDE (polybrominated diphenyl ether) in amounts greater than 1000 ppm (0.1% by weight) per homogenous material (substance or mixture of substances with uniform composition such as solders, resins, platings, etc.); cadmium in amounts greater than 75 ppm per homogenous material.
Declaration on Allergens:	Based upon the information provided by Daikin America Inc.'s suppliers, none of the constituent parts used by Daikin America Inc. in the manufacture of this product were made with peanuts, tree nuts, fish, shell fish, eggs, milk, wheat or soy (or any ingredients derived from these products).
Animals or Animal bi-products:	Based on a comprehensive investigation, no animals or animal bi-products are used in the manufacturing process. Please note that we do not investigate the contents of peripherals and/or package accessories.
Human or Human bi-products:	Based on a comprehensive investigation, no human or human bi-products are used in the manufacturing process. Please note that we do not investigate the contents of peripherals and/or package accessories.
Absence of PFOA: Other:	This product does not contain intentionally added PFOA (perfluorooctanoic acid). State and local regulations may have specific requirements for this product or components of this product; consult specific state and local regulatory requirements for additional information.

SECTION 16. OTHER INFORMATION

For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components, Fluoropolymers Safe Handling Guide published by The Society of the Plastics Industry, and the DOT Emergency Response Guidebook.

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