



SAFETY DATA SHEET

Polyflon PTFE D Series

SECTION 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

DAIKIN TRADE NAME: Polyflon PTFE D Series
D-310

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.

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 PROTECTIVE EQUIPMENT

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.

VENTILATION:	Use local exhaust ventilation if material is heated above 350 °C or if spraying or coating.
OTHER PROTECTIVE EQUIPMENT:	Eyewash station and safety shower.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Milky-white dispersion
ODOR:	Ammonia type odor
ODOR THRESHOLD:	Not Available
pH:	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:	371 °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 EXPOSURE

Ingestion:	May be harmful if swallowed
Eye Contact:	May cause eye irritation
Skin Contact:	May cause slight irritation
Inhalation:	When thermally decomposed, this material can cause polymer fume fever.

CHRONIC EFFECTS OF EXPOSURE:	No Data Available
ACUTE TOXICITY:	No Data Available
SKIN CORROSION/IRRITATION:	No Data Available
SERIOUS EYE DAMAGE/IRRITATION:	No Data Available
RESPIRATORY OR SKIN SENSITIZATION:	No Data Available
GERM CELL MUTAGENICITY:	No Data Available
CARCINOGENICITY:	None of the components in this material are listed by NTP, OSHA or IARC.
REPRODUCTIVE TOXICITY:	No Data Available
STOT-SINGLE EXPOSURE:	No Data Available
STOT-REPEATED EXPOSURE:	No Data Available
ASPIRATION HAZARD:	Not Applicable

SECTION 12. ECOLOGICAL INFORMATION

BIODEGRADABILITY: No data

BIOACCUMULATION: No data

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

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: This product does not contain intentionally added PFOA (perfluorooctanoic acid).

Other: 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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SDS Issued: 06/13/2007

SDS Revised: 06/04/2013