

DAIKIN-POLYFLON® PTFE

PTFE Molding Powders, PTFE Fine Powders & PTFE Dispersions

Chemical Name:	Polytetrafluoroethylene
CAS Registry Number:	9002-84-0
CAS Name:	Poly(tetrafluoroethylene)

Uses: Daikin PTFE (Polytetrafluoroethylene) products are well suited for a variety of demanding chemical, mechanical, electrical, and nonstick surface applications. PTFE is available in three grades: molding powders, fine powders, and dispersions.

PTFE molding powders are excellent, fine cut resins typically used for packings, gaskets, diaphragms, bellows, corrosion-resistant linings, piping components, pump parts, O-rings, connectors, sockets, spacers, electronic parts, and laboratory equipment.

PTFE fine powders are soft, white polymers that are produced from PTFE aqueous dispersions. Some typical uses are expanded membrane, electric wiring, electric circuits, transformers, electric motors, industrial wiring, high temperature wiring, electric furnaces, vacuum tubes, wiring subject to corrosive chemical environments, sealing tape for threaded pipe joints, wraps for chemical/ heat resistant insulation of wire or coil film, pump and valve parts, terminals, bushing, out insulators, hoses and tubes for fuels, high temperature or corrosive fluids, foods, chemicals, oil hydraulic equipment, and push-pull cables.

PTFE dispersions are milky white dispersions of stabilized minute particles of PTFE obtained by emulsion polymerization of tetrafluoroethylene. Typical uses are cast films, glass fabric laminates, battery binders and impregnating porous material. PTFE dispersions can also be formulated into release coatings by adding fillers, adhesion agents, pigments, and other additives.

Physical and Chemical Properties: Daikin PTFE fine powders, molding powders, and dispersions are completely inert to attack by all chemicals except high-temperature, high-pressure elemental fluorine gas, molten alkaline metals, and chlorine trifluoride.

PTFE offers a broad range of desirable characteristics, including chemical stability, excellent electrical properties, heat resistance, chemical resistance, lubricating and low friction properties, and dielectric characteristics. It also possesses an excellent non-sticking quality which prevents most adhesives from adhering to it.

Health and Environmental Effects: Fluoropolymers are known for chemical stability and low reactivity. These materials have demonstrated little if any toxicological activity.

Exposure Effects of Decomposition Products: When PTFE is heated to temperatures above 260°C, some decomposition products may be given off. These effects of decomposition products may be harmful, and inhalation of these fumes must be avoided. Inhaling thermal decomposition products could result in chills, headaches, nausea, breathing discomfort, cough, or sore throat.

Processing Precautions: Ovens, process equipment and working areas must be adequately ventilated. Proper PPE must be worn. For further information, please refer to the SDS, which is available at, [Daikin America | \(daikin-america.com\)](http://Daikin America | (daikin-america.com)), for the PTFE products and the *Guide to the Safe Handling of Fluoropolymer Resins*, published by the Plastics Industry Association, 1425 K Street, NW, Suite 500, Washington, DC, 20005, (phone: 202-974-5200).

Quality / Regulatory Daikin America's manufacturing facility is registered to ISO-9001 (Quality System), ISO-14001 (Environmental System) and Responsible Care 14001: 2015 (Safety, Health, Environment and Security).

Inventory List USA/TSCA - Yes, Canada/DSL - Yes, China/IECSC - Yes, Japan/ENCS - Yes, Taiwan/TSCI - No, South Korea/KECI - Yes: KE-33429, New Zealand/NZIoC - Yes, Philippines/PICCS - Yes, Australia/AICS - Yes