

FACTS ABOUT AMT'S PARYLENE-PF COATINGS

AMT's PARYLENE-PF coatings are manufactured using a unique Thermo-plasma process starting with some of the same chemical compounds as used for making conventional Parylenes. The process adds **fluoro-functionalities** to the polymer without altering any of the basic characteristics of the Parylene polymer.

Unlike conventional Parylenes, PARYLENE-PF is extremely hydrophobic on surface and useful for applications that require a high degree of moisture resistance, as in space and biomedical microelectronics.

Like its conventional counterparts, PARYLENE-PF can be deposited in thicknesses varying from few hundred Angstroms to several microns. It has the same mechanical properties, chemical resistance, thermal and electrical properties as conventional Parylene N and Parylene C coatings.

PARYLENE-PF coatings are extremely smooth, chemically resistant and biocompatible materials.

SUITABLE SUBSTRATES

Choose from the full range of substrate lengths and diameters from suppliers of microporous films, tubing and fibers, as well as metal, glass and plastic substrates.

IDEAL IN MICROELECTRONICS FOR SPACE AND MEDICAL APPLICATIONS

Maintains performance in harsh environments. Highly resistant to moisture. Withstands sterilization by:

- Autoclave
- Ethylene oxide
- Solvent methods

OLEOPHOBIC AND HYDROPHOBIC PROPERTIES

PARYLENE-PF is one of the very few polymers that repels both water and oil. In this respect, it competes with PTFE polymer but unlike PTFE, it is applied at room temperature using a solvent-less vacuum process.

CHEMICALLY & THERMALLY STABLE COATINGS

- Resists attack by most organic and inorganic solvents
- Offers extremely high moisture barrier properties
- Thermally stable up to 200° C in inert environment; 100° C in air
- Excellent resistance to cryogenic conditions

CHEMICALLY BONDED TO SUBSTRATE

- Applied uniformly to entire surface including small crevices
- Does not strip or peel

APPLICATIONS

PARYLENE-PF can be applied to metal, plastic, ceramic and microporous substrates in thicknesses from few hundred angstroms to microns.

BIOCOMPATIBILITY

Generally suitable for invasive and noninvasive medical applications where conventional Parylenes are recommended.

