



** ERTALYTE® is the registered trademark of

MITSUBISHI CHEMICAL ADVANCED MATERIALS

Ertalylte® PET-P offers dimensional stability coupled with excellent wear resistance, low coefficient of friction, high strength, and resistance to moderate acid solutions. Ertalylte's properties make it especially suitable for the manufacture of precision mechanical parts which are capable of sustaining high loads and enduring wear conditions.

Ertalylte® has a continuous service temperature of 210°F (100°C) and its melting point is almost 150°F higher than acetals.

Ertalylte® is FDA compliant in natural and black colors. Natural Ertalylte is also USDA, 3A-Dairy and Canada AG compliant. It is an excellent candidate for parts used in the food processing and equipment industries.

Ertalylte® TX is an internally lubricated version of PET-P, providing enhanced wear and inertness over general purpose nylons or acetals. Containing uniformly dispersed solid lubricant, Ertalylte TX provides a lower wear rate and coefficient of friction than unmodified PET or PBT and even internally lubricated materials such as Delrin® AF

ADVANTAGES:

- Good For Both Wet And Dry Environments · High Strength And Rigidity · Ideal For Close Tolerance Parts · Excellent Stain Resistance · Good Wear Resistance And Excellent Dimensional Stability · Better Resistance To Acids Than Nylon or Acetal

APPLICATIONS INCLUDE:

- Food Equipment Components · Manifolds · Carousel · Filter Track · Locating Disk And Ring · Distribution Valves · Fuel Pump Components · Fuel System Connector And Rotors

GENERAL PROPERTIES	Test Methods ISO / (IEC)	ERTALYTE PET-P	ERTALYTE TX
COLOUR		○ White ● Black	● Pale Grey
PHYSICAL			
Specific Gravity (g/cm ³)	D792	1.41	1.44
Water Absorption, 24 hrs (%)	D570	0.07	0.06
MECHANICAL @ 73°K			
Tensile Strength (psi)	D638	12,400	10,500
Tensile Elongation at Break (%)	D638	20	5
Tensile Modulus (psi)	D638	460,000	500,000
Flexural Strength (psi)	D790	18,000	14,000
Flexural Modulus (psi)	D790	490,000	360,000
Compressive Strength (psi)	D695	15,000	15,250
Rockwell Hardness	D785	M 96	M 94
IZOD Notched Impact (ft-lb/in)	D256	0.5	0.4
THERMAL			
Coeff. of Thermal Expansion (x10 ⁻⁵ in/in/°F)	D831	3.3	4.5
Heat Deflection Temp (°F / °C) @ 264 psi	D648	240 / 116	180 / 82
Melting Temp (°F / °C)	D3418	491 / 225	491 / 225
Max Operating Temp (°F / °C)	-	210 / 99	210 / 199
Thermal Conductivity (BTU-in/ft ² -hr-°F)	F433	2	1.9
Flammability Rating	UL-94	HB	HB
ELECTRICAL			
Dielectric Strength (V/mil) short time	D149	385	533
Dielectric Constant at 1 MHz	D150	3.4	3.6
Dissipation Factor at 1 MHz	D150	0.02	0.02
Surface Resistivity (ohm/sq) at 50% RH	EOS/ESD S11.11	> 10 ¹³	> 10 ¹³

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.