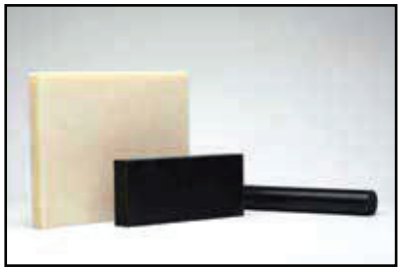
ERTALON® 66SA / 6SA / 6PLA / LFX

PolyAmide (Nylon)



*** ERTALON® is the registered trademark of*

MITSUBISHI CHEMICAL ADVANCED MATERIALS

Nylon is one of the most widely used plastics in the world, especially as a bearing and wear material. Nylons are frequently used as replacements for bronze, brass, aluminum, steel and other metals, as well as other plastics, wood, and rubber.

ADVANTAGES:

· High Mechanical Strength, Stiffness, Hardness And Toughness · Good Fatigue Resistance · High Mechanical Damping Ability · Good Sliding Properties · Excellent Wear Resistance · Good Electrical Insulating Properties · High Resistance Against High Energy Radiation (Gamma And X-rays) · Good Machinability

APPLICATIONS INCLUDE:

· Sleeve And Slide Bearings · Cutting And Chopping Boards · Support And Guide Wheels · Sleeves For Wheels And Rollers, Pulleys And Pulley-Linings, Cams · Conveyor Rollers · Tension Rollers · Buffer Blocks · Hammer Heads · Scrapers · Gear Wheels · Starwheels · Sprockets · Feed Screws · Seal-Rings · Wear Pads · Insulators

GENERAL PROPERTIES	ASTM or UL Test	ERTALON 66SA (Extruded)	ERTALON 6 SA (Extruded)	ERTALON 6 PLA (CAST)	ERTALON LFX (Lubricated Cast)
Colour		○ White ● Black	○ White ● Black	● Ivory ● Black	● Green
PHYSICAL					
Specific Gravity (g/cm^3)	D792	1.15	1.14	1.15	1.14
Water Absorption, 24 hrs (%)	D570	0.3	9.0	0.60	0.30
MECHANICAL @ 73˚F					
Tensile Stress at Yield (psi)	D638	12,000	11,600	12,000	9,900
Tensile Strain at Break (%)	D638	50	>50	20	50
Tensile Modulus of Elasticity (psi)	D638	425,000	479,000	400,000	465,000
IZOD Impact Strength, Notched	D256	0.6	-	0.4	-
Rockwell Hardness	D785	M88	M 85	M88	M82
THERMAL					
Coeff. of Linear Thermal Expansion (in./in./°F)	E831	5.5×10^{-5}	5.8×10^{-5}	5×10^{-6}	5.6×10^{-5}
Heat Deflection Temp (°F / °C) @ 1.8 MPa	D648	200/93	158 / 70	200 / 93	200 / 93
Thermal Conductivity at 23 °C (BTU IN./[hr.ft^2.°F])	-	1.70	1.94	1.70	-
Flammability Rating @ (3 mm thickness)	UL-94	HB	HB	HB	HB
ELECTRICAL					
Surface Resistivity (ohms/sq)	ANSI / ESD STM 11.11	$> 10^{13}$	$> 10^{13}$	$> 10^{13}$	$> 10^{13}$
Volume Resistivity (ohm-cm)	{60093}	$> 10^{14}$	$> 10^{14}$	$> 10^{14}$	$> 10^{14}$
Dielectric Dissipation Factor Tan δ : at 1 MHz	D150	0.02	0.019	-	-

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.