Westlake plastics
LIFE IN POLYMERS

MODERN plastics
"Setting the Standards in Plastics Distribution"™
ISO 9001:2008 and ISO 13485:2003 Certified

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PRODUCT BULLETIN

DIELUX® ACETAL COPOLYMER—PTFE FILLED

Dielux PTFE filled acetal copolymer is an outstanding bearing and wear material for use in both wet and dry environments. Dielux is frequently used in place of traditional metal bearing materials when low friction, excellent wear properties, and good dimensional stability are required. The PTFE filler allows Dielux to be used without additional lubricants in applications where grease and oil are undesirable. The white grade of Dielux is FDA compliant for use in food processing machinery.

The following physical property information is based on typical values of the base PTFE filled acetal copolymer resin.

Applications Include:
- Bearings
- Bushings
- Wear pads
- Gears

Advantages of Dielux:
- Excellent wear properties in both wet and dry environments
- Low friction
- Low moisture absorption
- Good chemical resistance
- Good dimensional stability
- High strength and stiffness
- Easy to machine
- FDA compliant (white only)

Manufacturing Capabilities:
- **Rod:** 1/8" to 4" dia.
- **Sheet:** 1/4" to 4" thick

Colors/Grades:
- Brown
- White **FDA**

In addition to our standard capabilities, Westlake also has the ability to process custom resins in various sizes and colors with some exceptions.

Property	Units	Test Standard	Result
Mechanical			
Flexural Modulus	psi	ASTM D790	299,000
Flexural Strength @yield	psi	ASTM D790	9,500
Izod Impact Strength Notched @73°F	ft•lbs/in	ASTM D256	0.80
Tensile Elongation @break	%	ASTM D638	22.3
Tensile Strength @yield	psi	ASTM D638	6,800
Thermal			
Heat Deflection Temperature @264 psi	°F	ASTM D648	184
Electrical			
Dielectric Strength	V/m	FED.T.M.ST.406BM4031	450,000
Tribological			
Coefficient of Friction Dynamic Static	 40 psi, 50 fpm 40 psi	 ASTM D3702 (modified) ASTM D3702 (modified)	 0.24 0.13
Wear Factor (K)	$(10^{-10}in^5\text{-}min)/(ft\bullet lb\text{-}hr)$	ASTM D3702 (modified)	10
Other			
Specific Gravity	—	ASTM D792	1.50
Water Absorption @24 hours	%	ASTM D570	0.10