



PRODUCT BULLETIN

POMALUX® ACETAL COPOLYMER

Pomalux is a high-performance acetal copolymer that has excellent mechanical, electrical, and wear properties. It is engineered to provide outstanding dimensional stability, even when machining parts with complex geometries. Pomalux is an excellent choice for many bearing and wear applications since it has low coefficient of friction and wears well in both wet and dry environments. It is widely used for assembly jigs and fixtures because of its inherent dimensional stability and excellent wear properties. Pomalux is often specified for electrical applications when low moisture absorption and high dielectric strength are required. Both natural (white) and black Pomalux are FDA compliant for use in food processing machinery.

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

Applications Include:

- Jigs and fixtures
- Pump and valve parts
- Bushings and bearings
- Gears
- Wear pads
- Electrical components

Advantages of Pomalux:

- High strength and stiffness
- Low friction
- Easy to machine
- Good dimensional stability
- Low moisture absorption
- Resists abrasive wear in both wet and dry environments
- Good chemical resistance
- Excellent electrical properties
- FDA compliant

Manufacturing Capabilities:

- **Rod** (unfilled): 1/8" to 8" dia.
- **Sheet** (unfilled): .030" to 3/16" thick
- **Slab** (unfilled): 1/4" to 6" thick
- **Slab** (filled): 1/4" to 4" thick
- **Film**: .002" to .029" thick

Colors/Grades:

- Natural (white) **FDA**
- Black **FDA**
- Glass-filled
- PTFE-filled (Diellux)
- Colors available on a custom basis

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	Unfilled	25% Glass Filled
Mechanical				
Compressive Strength @10% deflection	psi	ASTM D695	16,000	—
Flexural Modulus	psi	ASTM D790	375,000	1,100,000
Hardness	M Scale	ASTM D785	M78	M84
Izod Impact Strength Notched @-40°F	ft•lbs/in	ASTM D256	1.2	.70
Izod Impact Strength Notched @-73°F	ft•lbs/in	ASTM D256	1.5	1.1
Tensile Elongation @break @-40°F	%	ASTM D638	30.0	—
Tensile Elongation @break @73°F	%	ASTM D638	75.0	—
Tensile Modulus	psi	ASTM D638	357,000	1,250,000
Tensile Strength @yield @73°F	psi	ASTM D638	8,800	16,000
Tensile Strength @yield @-40°F	psi	ASTM D638	13,700	23,100
Thermal				
Coefficient of Thermal Expansion	in/in/°F	ASTM D696	1.2x10 ⁻⁴	.3x10 ⁻⁴
Flammability Rating @.060"	—	UL94	HB	—
Heat Deflection Temperature @264 psi	°F	ASTM D648	230	325
Thermal Conductivity	cal/sec/cm ² /°C/cm	ASTM C177	1.6	—
Other				
Specific Gravity	—	ASTM D792	1.41	1.58
Water Absorption @24 hours	%	ASTM D570	0.20	0.20