



Ardel® (polyarylate)

Stock shapes extruded from Ardel® resin are specifically formulated to endure the damaging effects of UV light. When exposed to UV light, this unique material undergoes a molecular rearrangement resulting in the formation of a protective layer that essentially serves as a UV stabilizer. This inherent UV stability combined with superior retention of optical and mechanical properties make polyarylate an ideal choice for any application where weathering effects could pose a problem. The following physical property information is based on typical values of the base Ardel® polyarylate resin (PAR).

Applications Include:

- Semiconductor components
- Solar energy components
- Appliance parts
- Snap lock connectors

Advantages of Polyarylate:

- Exceptional UV stability
- Transparency
- Good electrical properties
- Toughness
- Excellent flexural recovery

Manufacturing Capabilities:

- Rod:** 3 /16" to 6" diameter
- Sheet:** .035" to 3 /16" thick
- Slab:** 1 /4" to 4" thick
- Film:** .001" to .029" thick

Color/Grades: Transparent light amber

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

	Units	ASTM Test	Result
Mechanical			
Tensile Strength @yield	psi	D638	10,000
Tensile Strength @break	psi	D638	—
Tensile Modulus	psi	D638	300,000
Tensile Elongation @yield	%	D638	8.4
Tensile Elongation @break	%	D638	50.0
Flexural Strength @yield	psi	D790	11,000
Flexural Modulus	psi	D790	310,000
Compressive Strength @yield	psi	D695	12,180
Compressive Modulus	psi	D695	—
Izod Impact Strength			
Un-Notched	ft•lbs/in	D256	—
Notched @73°F	ft•lbs/in	D256	3.8
Hardness (R, M, L or D)	—	D7852 D2240	R125
Thermal			
Heat Deflection Temperature			
@66 psi	°F	D648	356
@264 psi	°F	D648	345
Coefficient of Thermal Expansion	in/in/°F	D696	6.1x10 ⁻⁵
Flammability Rating—UL94 @.125"	—	—	V-0
Thermal Conductivity	(BTU•in)/(hr•ft 2 •°F)	C177	1.48
Limiting Oxygen Index	%	D2863	36.0
Electrical			
Dielectric Strength	V/mil	D149	400
Dielectric Constant @1kHz	—	D150	3.32
Dissipation Factor @1kHz	—	D150	0.0040
Volume Resistivity	ohm•cm	D257	2x10 ¹⁴
Optical			
Haze	%	D1746	2.3
Transparency	%	D1746	87
Other			
Specific Gravity	—	D792	1.21
Water Absorption @24 hours	%	D570	0.26