Westlake plastics
LIFE IN POLYMERS

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PRODUCT BULLETIN

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 polyarylate resin.

Applications Include:
- Semiconductor components
- Solar energy components
- Appliance parts
- Snap lock connectors

Advantages of Ardel:
- Exceptional UV stability
- Transparency
- Toughness
- Excellent flexural fatigue resistance

Manufacturing Capabilities:
- **Rod:** 1/4" to 4" dia.
- **Sheet:** .035" to 3/16" thick
- **Slab :** 1/4" to 4" thick
- **Film:** .001" to .029" thick

Colors/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.

Property	Units	Test Standard	Result
Mechanical			
Tensile Strength @yield	psi	ASTM D638	10,000
Tensile Elongation @break	%	ASTM D638	60.0
Flexural Strength @yield	psi	ASTM D790	12,200
Flexural Modulus	psi	ASTM D790	305,000
Compressive Strength @yield	psi	ASTM D695	12,200
Izod Impact Notched @73°F	ft•lbs/in	ASTM D256	4.2
Hardness	R Scale	ASTM D7852	R125
Thermal			
Heat Deflection Temperature @264 psi	°F	ASTM D648	347
Coefficient of Thermal Expansion	in/in/°F	ASTM D696	$3.4x10^{-5}$
Flammability Rating	—	UL94	V-2
Electrical			
Dielectric Strength	kV/mil	ASTM D149	990
Dielectric Constant @1MHz	—	ASTM D150	3
Dissipation Factor @1kHz	—	ASTM D150	0.015
Volume Resistivity	ohm•cm	ASTM D257	$2x10^{16}$
Optical			
Transparency @3mm	%	ASTM D1003	87
Other			
Specific Gravity	—	ASTM D792	1.21
Water Absorption @24 hours	%	ASTM D570	0.26

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