

**TAIRILITE® AC2820**

 Formosa Chemicals & Fibre Corporation - *Polycarbonate*
**General Information**
**Product Description**

Diffusion

Features: Light diffusion, Mid-high flow, UV resistance

**General**

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Good Light Diffusion	• High Flow	• UV Resistant
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
UL File Number	• E162823		

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity <sup>2</sup>	1.20		ASTM D792
Density (73°F)	1.20	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	27	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	27	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage (0.126 in)	0.50 to 0.70	%	ISO 2577
<b>Mechanical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength <sup>3</sup> (73°F)	8530	psi	ASTM D638
Tensile Stress (73°F)	8700	psi	ISO 527-2/50
Flexural Modulus <sup>4</sup> (73°F)	324000	psi	ASTM D790
Flexural Modulus <sup>4</sup> (73°F)	323000	psi	ISO 178
Flexural Strength <sup>4</sup> (73°F)	14500	psi	ASTM D790
Flexural Stress <sup>4</sup> (73°F)	14500	psi	ISO 178
<b>Impact</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Charpy Notched Impact Strength (73°F, 0.157 in)	2.9	ft·lb/in <sup>2</sup>	ISO 179
Notched Izod Impact (73°F, 0.126 in)	1.1	ft·lb/in	ASTM D256
<b>Hardness</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (R-Scale, 73°F)	122		ASTM D785
<b>Thermal</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load <sup>5</sup> (264 psi, Unannealed, 0.126 in)	257	°F	ASTM D648
Deflection Temperature Under Load <sup>5</sup> (264 psi, Unannealed, 0.157 in)	257	°F	ISO 75-2/A
RTI Elec	176	°F	UL 746B
RTI Imp	176	°F	UL 746B
RTI Str	176	°F	UL 746B
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating			UL 94
0.04 in	V-2		
0.04 in, All Color	V-2		
<b>Optical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Light Transmittance (126.0 mil)	20.0 to 99.0	%	ASTM D1003
Haze (126.0 mil)	88.0 to 91.0	%	ASTM D1003

