

**TAIRILITE® AC3843**

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

Transparent Flame Retardant

Features: Transparency, Flame retardant, Mid-low flow, UV resistance, Halogen free.

**General**

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Additive	• Flame Retardant
Features	• Flame Retardant • Medium Flow • Halogen Free • UV Resistant
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
UL File Number	• E162823
Appearance	• Clear/Transparent

**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)	12	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	12	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage	0.50 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)	10100	psi	ASTM D638
Tensile Stress (73°F)	10200	psi	ISO 527-2/50
Flexural Modulus <sup>4</sup> (73°F)	313000	psi	ASTM D790
Flexural Modulus <sup>4</sup> (73°F)	313000	psi	ISO 178
Flexural Strength <sup>4</sup> (73°F)	15600	psi	ASTM D790
Flexural Stress <sup>4</sup> (73°F)	15700	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)	36	ft·lb/in <sup>2</sup>	ISO 179
Notched Izod Impact (73°F, 0.126 in)	15	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
Rockwell Hardness (R-Scale, 73°F)	122		ISO 2039-2
<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)	262	°F	ASTM D648
Deflection Temperature Under Load <sup>5</sup> (264 psi, Unannealed, 0.157 in)	262	°F	ISO 75-2/A
RTI Elec	266	°F	UL 746B
RTI Imp	266	°F	UL 746B
RTI Str	266	°F	UL 746B
<b>Flammability</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating (0.04 in, All Color)	V-0		UL 94
<b>Optical</b>	<b>Nominal Value</b>	<b>Unit</b>	<b>Test Method</b>
Light Transmittance (39.37 mil)	> 87.0	%	ASTM D1003



Haze (39.37 mil)

< 1.00 %

ASTM D1003

Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 23°C

<sup>3</sup> 2.0 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 120°C/h

