

TAIRILITE® AC3830

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

Self Extinguishing Grade

Features: Light diffusion, Mid flow, UV resistance, Halogen free

General

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

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.20		ASTM D792
Density (73°F)	1.20	g/cm ³	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
Outdoor Suitability	f1		UL 746C
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (73°F)	10100	psi	ASTM D638
Tensile Stress (73°F)	10200	psi	ISO 527-2/50
Flexural Modulus ⁴ (73°F)	313000	psi	ASTM D790
Flexural Modulus ⁴ (73°F)	313000	psi	ISO 178
Flexural Strength ⁴ (73°F)	15600	psi	ASTM D790
Flexural Stress ⁴ (73°F)	15700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F, 0.157 in)	33	ft-lb/in ²	ISO 179
Notched Izod Impact (73°F, 0.126 in)	0.094	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 73°F)	122		ASTM D785
Rockwell Hardness (R-Scale, 73°F)	122		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ⁵ (264 psi, Unannealed, 0.126 in)	262	°F	ASTM D648
Deflection Temperature Under Load ⁵ (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
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.04 in	V-0		
0.12 in	5VA		

Optical

Nominal Value Unit

Test Method



Light Transmittance (126.0 mil)	60.0 to 90.0 %	ASTM D1003
Haze (126.0 mil)	40.0 to 91.0 %	ASTM D1003

Notes

¹ Typical properties: these are not to be construed as specifications.

² 23°C

³ 2.0 in/min

⁴ 0.079 in/min

⁵ 120°C/h

