

TAIRILITE® AC3853

 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 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	5.0E-3 to 7.0E-3	in/in	ASTM D955
Molding Shrinkage	0.50 to 0.70	%	ISO 2577
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (73°F)	103000	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)	36	ft·lb/in ²	ISO 179
Notched Izod Impact (73°F, 0.126 in)	15	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 (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 (0.10 in, All Color)	V-0		UL 94
Optical	Nominal Value	Unit	Test Method
Light Transmittance (126.0 mil)	> 87.0	%	ASTM D1003



Haze (126.0 mil)	< 1.00 %	ASTM D1003
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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

