

TAIRILITE® AC9140

Formosa Chemicals & Fibre Corporation - Polycarbonate

General Information

Product Description

Ultra-low Temp resistance copolymer

Features: Transparent, Mid flow, Low temperature impact property, UV resistance.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Low Temperature Impact Resistance	• Medium Flow	• UV Resistant
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.18		ASTM D792
Density (73°F)	1.18	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	13	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	13	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	6.0E-3 to 8.0E-3	in/in	ASTM D955
Molding Shrinkage	0.60 to 0.80	%	ISO 2577
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (73°F)	8530	psi	ASTM D638
Tensile Stress (73°F)	8700	psi	ISO 527-2/50
Flexural Modulus ⁴ (73°F)	299000	psi	ASTM D790
Flexural Modulus ⁴ (73°F)	299000	psi	ISO 178
Flexural Strength ⁴ (73°F)	14200	psi	ASTM D790
Flexural Stress ⁴ (73°F)	14200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (73°F, 0.157 in)	29	ft-lb/in ²	ISO 179
Notched Izod Impact (73°F, 0.126 in)	12	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 73°F)	120		ASTM D785
Rockwell Hardness (R-Scale, 73°F)	120		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load ⁵ (264 psi, Unannealed, 0.126 in)	248	°F	ASTM D648
Deflection Temperature Under Load ⁵ (264 psi, Unannealed, 0.157 in)	248	°F	ISO 75-2/A
RTI Elec	176	°F	UL 746B
RTI Imp	176	°F	UL 746B
RTI Str	176	°F	UL 746B
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.08 in, All Color)	V-2		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

