KIBITON® Q-Resin PB-5903

CHI MEI CORPORATION - Styrene Butadiene Block Copolymer

Tuesday, November 5, 2019

General Information

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
RoHS Compliance	• RoHS Compliant		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity [2]	1.02		ASTM D792
Density (73°F)	1.01	g/cm³	ISO 1183
Melt Mass-Flow Rate (200°C/5.0 kg)	10	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (200°C/5.0 kg)	10	cm³/10min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [3] (Yield)	4120	psi	ASTM D638
Tensile Stress (Yield, 0.157 in)	3920	psi	ISO 527-2/50
Tensile Stress (Break, 0.157 in)	2760	psi	ISO 527-2/50
Tensile Strain (Yield, 0.157 in)	2.0	%	ISO 527-2/50
Tensile Strain (Break, 0.157 in)	200	%	ISO 527-2/50
Flexural Modulus [4]	199000	psi	ASTM D790
Flexural Modulus [5] (0.157 in)	2.03E+8	psi	ISO 178
Flexural Strength [4]	4830	psi	ASTM D790
Flexural Stress [5] (0.157 in)	5220	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	1.3	ft·lb/in²	ISO 179
Charpy Unnotched Impact Strength (73°F)	34	ft·lb/in²	ISO 179
Notched Izod Impact (73°F, 0.252 in)	0.44	ft·lb/in	ASTM D256
Notched Izod Impact Strength (73°F)	1.1	ft·lb/in²	ISO 180/1A
Hardness	**Nominal Value**	**Unit**	**Test Method**
Durometer Hardness (Shore D)	71		ASTM D2240
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature (264 psi, Unannealed)	160 to 181	°F	ISO 75-2/A
Deflection Temperature Under Load (264 psi, Annealed)	158	°F	ASTM D648
Vicat Softening Temperature	183	°F	ASTM D1525 [6]
Vicat Softening Temperature			
--	199	°F	ISO 306/A50
--	192	°F	ISO 306/A120
--	158	°F	ISO 306/B50
--	154	°F	ISO 306/B120
Optical	**Nominal Value**	**Unit**	**Test Method**
Transmittance	90.5	%	ASTM D1003
Haze	1.50	%	ASTM D1003

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	320 to 356	°F
Middle Temperature	356 to 392	°F
Front Temperature	356 to 392	°F
Processing (Melt) Temp	356 to 374	°F
Mold Temperature	86 to 122	°F
Injection Pressure	711 to 996	psi
Holding Pressure	142 to 569	psi
Back Pressure	71.1 to 142	psi

Notes

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

[2] 23°C

[3] 2.0 in/min

[4] 0.11 in/min

[5] 0.079 in/min

[6] Rate A (50°C/h), Loading 1 (10 N)