

**ARLEN™ C240**

Mitsui Chemicals America, Inc. - Polyamide 6T

**General Information**
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Material Status	• Commercial: Active
Availability	• North America
Filler / Reinforcement	• Glass Fiber, 40% Filler by Weight
Uses	• Electrical/Electronic Applications
Forms	• Pellets

**Properties <sup>1</sup>**

<b>Physical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Density / Specific Gravity	1.53	--		ASTM D792
Molding Shrinkage - Flow (0.0787 in)	4.0E-3	--	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.0787 in)	8.0E-3	--	in/in	ASTM D955
Water Absorption				ASTM D570
24 hr, 73°F	0.20	--	%	
24 hr, 212°F	2.8	--	%	
<b>Mechanical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Tensile Strength	30500	26100	psi	ASTM D638
Tensile Elongation (Break)	3.0	3.0	%	ASTM D638
Flexural Modulus	1.89E+6	1.31E+6	psi	ASTM D790
Flexural Strength	43500	37700	psi	ASTM D790
<b>Impact</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Notched Izod Impact	1.6	1.7	ft·lb/in	ASTM D256
<b>Hardness</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Rockwell Hardness (M-Scale)	110	--		ASTM D785
<b>Thermal</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Deflection Temperature Under Load (264 psi, Unannealed)	572	--	°F	ASTM D648
Glass Transition Temperature	185	--	°F	DSC
Melting Temperature	590	--	°F	
CLTE - Flow	1.1E-5	--	in/in/°F	ASTM D696
CLTE - Transverse	2.5E-5	--	in/in/°F	ASTM D696
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Volume Resistivity	1.0E+16	--	ohms·cm	ASTM D257
Dielectric Strength	760	--	V/mil	ASTM D149
Dielectric Constant (1 MHz)	4.50	--		ASTM D150
Dissipation Factor (1 MHz)	0.018	--		ASTM D150
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Flame Rating	HB	--		UL 94

**Processing Information**

<b>Injection</b>	<b>Dry Unit</b>
Drying Temperature	230 °F
Drying Time	2.0 to 6.0 hr
Hopper Temperature	122 to 194 °F
Rear Temperature	572 to 617 °F
Middle Temperature	599 to 635 °F
Front Temperature	608 to 635 °F
Nozzle Temperature	599 to 635 °F
Mold Temperature	194 to 284 °F



Injection Rate	Moderate
Screw Speed	150 rpm

**Injection Notes**

Injection Pressure: Medium Pressure

**Notes**

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

