

# Starex TX-0510

Lotte Chemical Corporation - Methyl Methacrylate / ABS

## General Information

### General

Uses • Electrical/Electronic Applications

### Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity (Natural)	1.10		ASTM D792
Density (Natural)	1.10	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	16	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	16	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.3E-3 to 5.2E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.4E-3 to 5.4E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	287000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	6400	psi	ASTM D638
Tensile Stress (Yield)	6820	psi	ISO 527-2/50
Tensile Strength <sup>2</sup> (Break)	4690	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	19	%	ASTM D638
Flexural Modulus <sup>3</sup>	305000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	319000	psi	ISO 178
Flexural Strength <sup>3</sup>	9250	psi	ASTM D790
Flexural Stress <sup>4</sup>	10200	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	6.2	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	2.8	ft-lb/in	
73°F, 0.250 in	2.8	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	5.7	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	109		ASTM D785
Rockwell Hardness (R-Scale)	110		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	172	°F	
Vicat Softening Temperature	190	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
0.06 in		HB	
0.12 in		HB	

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#### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	176	°F
Drying Time		
Desiccant Dryer	2.0	hr
Hot Air Dryer	2.0	hr
Suggested Max Moisture	0.050	%
Rear Temperature	392 to 419	°F
Middle Temperature	419	°F
Front Temperature	419 to 446	°F
Nozzle Temperature	446	°F
Mold Temperature	104 to 140	°F
Injection Pressure	7110 to 28400	psi
Back Pressure	71.1 to 711	psi
Screw Speed	10 to 100	rpm

#### Injection Notes

Hot Runner Temperature: 230°C

#### Notes

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

<sup>2</sup> 0.20 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm