

# Starex SF-0505EH

Lotte Chemical Corporation - Methyl Methacrylate / ABS

## General Information

### General

Uses • Appliances • 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)	11	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	11	g/10 min	ISO 1133
Molding Shrinkage - Flow (0.126 in)	4.0E-3 to 4.8E-3	in/in	ASTM D955
Molding Shrinkage - Across Flow (0.126 in)	4.1E-3 to 5.1E-3	in/in	ASTM D955
Molding Shrinkage			ISO 294-4
Across Flow : 0.0787 in	0.41 to 0.51	%	
Flow : 0.0787 in	0.40 to 0.48	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus <sup>2</sup>	324000	psi	ASTM D638
Tensile Strength <sup>2</sup> (Yield)	7400	psi	ASTM D638
Tensile Stress (Yield)	7690	psi	ISO 527-2/5
Tensile Strength <sup>2</sup> (Break)	5690	psi	ASTM D638
Tensile Elongation <sup>2</sup> (Break)	30	%	ASTM D638
Flexural Modulus <sup>3</sup>	334000	psi	ASTM D790
Flexural Modulus <sup>4</sup>	337000	psi	ISO 178
Flexural Strength <sup>3</sup>	11100	psi	ASTM D790
Flexural Stress <sup>4</sup>	11500	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength <sup>5</sup> (73°F)	2.8	ft-lb/in <sup>2</sup>	ISO 179/1eA
Notched Izod Impact			ASTM D256
73°F, 0.125 in	1.3	ft-lb/in	
73°F, 0.250 in	1.1	ft-lb/in	
Notched Izod Impact Strength <sup>5</sup> (73°F)	2.9	ft-lb/in <sup>2</sup>	ISO 180/1A
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	114		ASTM D785
Rockwell Hardness (R-Scale)	114		ISO 2039-2
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed, 0.252 in	187	°F	
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed, 0.157 in	208	°F	
Vicat Softening Temperature	208	°F	ISO 306/B50
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 to 0.12 in)	HB		UL 94

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### Lotte Chemical Corporation - Methyl Methacrylate / ABS

#### Processing Information

Injection	Nominal Value	Unit
Drying Temperature		
Desiccant Dryer	176	°F
Hot Air Dryer	185	°F
Drying Time		
Desiccant Dryer	4.0	hr
Hot Air Dryer	4.0	hr
Suggested Max Moisture	< 0.050	%
Rear Temperature	392 to 410	°F
Middle Temperature	410 to 428	°F
Front Temperature	428 to 446	°F
Nozzle Temperature	464	°F
Mold Temperature	140	°F
Injection Pressure	2990 to 7110	psi
Back Pressure	71.1 to 284	psi
Screw Speed	30 to 70	rpm

#### Injection Notes

Hot Runner Temperature: 240°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