

TECHNICAL DATA SHEET

# STAREX SR-0330M

Lotte Chemical Corporation

ABS

**Processing**

Injection molding

Pellets, Natural color

**Applications**

Automotive

**Delivery Form**

Processing/Physical Characteristics	Value	Unit	Standard
Melt flow index, MFI	3	g/10min	ISO 1133
Temperature	220	°C	
Load	10	kg	
Molding shrinkage, parallel	0.55	%	ISO 294-4, 2577
Molding shrinkage, normal	0.55	%	ISO 294-4, 2577
Melt flow index, MFI	3	g/10min	ASTM D 1238
Temperature	220	°C	
Load	10	kg	
Mold shrinkage, MD	0.0055	mm/mm	ASTM D 955
Mold shrinkage, TD	0.0055	mm/mm	ASTM D 955
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2330	MPa	ISO 527
Yield stress	48	MPa	ISO 527
Stress at break	45	MPa	ISO 527
Strain at break	15	%	ISO 527
Poisson's ratio	0.35		ISO 527
Flexural modulus, 23°C	2350	MPa	ISO 178
Flexural strength	78	MPa	ISO 178
Charpy notched impact strength, +23°C	15	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	14	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	9	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	

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Mechanical Properties	Value	Unit	Standard
Rockwell hardness	R 113		ISO 2039-2
Tensile modulus	2200	MPa	ASTM D 638
Tensile strength at yield	41	MPa	ASTM D 638
Tensile strength at break	40	MPa	ASTM D 638
Elongation at break	17	%	ASTM D 638
Flexural modulus	2200	MPa	ASTM D 790
Flexural strength	63	MPa	ASTM D 790
Rockwell hardness	R 113		ASTM D 785
Izod impact notched, 1/8 in	130	J/m	ASTM D 256
Izod impact notched, 1/4 in	120	J/m	ASTM D 256
Izod impact notched, Low-Temperature	59	J/m	ASTM D 256
Temperature	-30	°C	
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	96	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	112	°C	ISO 75-1/-2
Vicat softening temperature, B	118	°C	ISO 306
UL 94 flame rating	HB		UL 94
Thickness tested	1.5	mm	
DTUL @ 66 psi	116	°C	ASTM D 648
DTUL @ 264 psi	104	°C	ASTM D 648
Other Properties	Value	Unit	Standard
Density	1070	kg/m <sup>3</sup>	ISO 1183
Density	1070	kg/m <sup>3</sup>	ASTM D 792
Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	90	°C	
Pre-drying - time	3 - 4	h	
Processing humidity	≤0.1	%	
Melt temperature	220 - 240	°C	
Mold temperature	40 - 80	°C	
Zone 1	190 - 215	°C	
Zone 2	215 - 235	°C	
Zone 3	230 - 250	°C	

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Processing Recommendation Injection Molding	Value	Unit	Standard
Nozzle temperature	240 - 265	°C	
Screw speed	50 - 150	rpm	
Injection pressure	49 - 150	MPa	
Back pressure	0.5 - 2	MPa	