

TECHNICAL DATA SHEET

STAREX WR-9120

Lotte Chemical Corporation
 ASA

Processing

Injection molding

Pellets, Natural color

Applications

Building construction

Delivery Form

Processing/Physical Characteristics	Value	Unit	Standard
Melt flow index, MFI	17	g/10min	ISO 1133
Temperature	220	°C	
Load	10	kg	
Molding shrinkage, parallel	0.44	%	ISO 294-4, 2577
Molding shrinkage, normal	0.47	%	ISO 294-4, 2577
Melt flow index, MFI	17	g/10min	ASTM D 1238
Temperature	220	°C	
Load	10	kg	
Mold shrinkage, MD	0.0044	mm/mm	ASTM D 955
Mold shrinkage, TD	0.0047	mm/mm	ASTM D 955
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2200	MPa	ISO 527
Yield stress	47	MPa	ISO 527
Stress at break	34	MPa	ISO 527
Strain at break	18	%	ISO 527
Poisson's ratio	0.35		ISO 527
Flexural modulus, 23°C	2100	MPa	ISO 178
Flexural strength	67	MPa	ISO 178
Charpy notched impact strength, +23°C	16	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	11	kJ/m ²	ISO 180/1A
Rockwell hardness	R 106		ISO 2039-2
Tensile modulus	2000	MPa	ASTM D 638
Tensile strength at yield	47	MPa	ASTM D 638

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Mechanical Properties	Value	Unit	Standard
Tensile strength at break	39	MPa	ASTM D 638
Elongation at break	50	%	ASTM D 638
Flexural modulus	2200	MPa	ASTM D 790
Flexural strength	67	MPa	ASTM D 790
Rockwell hardness	R 106		ASTM D 785
Izod impact notched, 1/8 in	200	J/m	ASTM D 256

Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	72	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	90	°C	ISO 75-1/-2
Vicat softening temperature, B	98	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	
UL 94 flame rating	HB		UL 94
Thickness tested	1.5	mm	
DTUL @ 264 psi	83	°C	ASTM D 648

Other Properties	Value	Unit	Standard
Density	1060	kg/m ³	ISO 1183
Density	1060	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	80 - 90	°C	
Pre-drying - time	2 - 4	h	
Processing humidity	≤0.05	%	
Melt temperature	240	°C	
Mold temperature	40 - 80	°C	
Zone 1	180 - 190	°C	
Zone 2	200 - 210	°C	
Zone 3	220 - 230	°C	
Nozzle temperature	240	°C	
Screw speed	50 - 150	rpm	
Injection pressure	49 - 250	MPa	
Back pressure	0.5 - 2	MPa	