

TECHNICAL DATA SHEET

STAREX WX-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	16	g/10min	ISO 1133
Temperature	220	°C	
Load	10	kg	
Molding shrinkage, parallel	0.7	%	ISO 294-4, 2577
Molding shrinkage, normal	0.7	%	ISO 294-4, 2577
Melt flow index, MFI	16	g/10min	ASTM D 1238
Temperature	220	°C	
Load	10	kg	
Mold shrinkage, MD	0.007	mm/mm	ASTM D 955
Mold shrinkage, TD	0.007	mm/mm	ASTM D 955
Mechanical Properties	Value	Unit	Standard
Tensile modulus	1900	MPa	ISO 527
Yield stress	43	MPa	ISO 527
Stress at break	32	MPa	ISO 527
Strain at break	13	%	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	12	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	18	kJ/m ²	ISO 180/1A
Rockwell hardness	R 104		ISO 2039-2
Tensile modulus	2100	MPa	ASTM D 638
Tensile strength at yield	45	MPa	ASTM D 638

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Mechanical Properties	Value	Unit	Standard
Tensile strength at break	45	MPa	ASTM D 638
Elongation at break	82	%	ASTM D 638
Flexural modulus	2100	MPa	ASTM D 790
Flexural strength	64	MPa	ASTM D 790
Rockwell hardness	R 104		ASTM D 785
Izod impact notched, 1/8 in	180	J/m	ASTM D 256
Izod impact notched, 1/4 in	98	J/m	ASTM D 256
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	77	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	88	°C	ISO 75-1/-2
Vicat softening temperature, B	97	°C	ISO 306
DTUL @ 66 psi	87	°C	ASTM D 648
DTUL @ 264 psi	77	°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	75 - 85	°C	
Pre-drying - time	2 - 4	h	
Processing humidity	≤0.05	%	
Melt temperature	220 - 250	°C	
Mold temperature	50 - 70	°C	
Zone 1	180 - 200	°C	
Zone 2	200 - 220	°C	
Zone 3	210 - 230	°C	
Nozzle temperature	230	°C	
Screw speed	50 - 90	rpm	
Injection pressure	98	MPa	
Back pressure	0.5 - 2	MPa	