

TECHNICAL DATA SHEET

STAREX SD-0150 U

Lotte Chemical Corporation

ABS

Processing

Injection molding

Delivery Form

Pellets, Natural color

Processing/Physical Characteristics	Value	Unit	Standard
Melt flow index, MFI	1.7	g/10min	ISO 1133
Temperature	200	°C	
Load	5	kg	
Molding shrinkage, parallel	0.3	%	ISO 294-4, 2577
Molding shrinkage, normal	0.3	%	ISO 294-4, 2577
Melt flow index, MFI	1.7	g/10min	ASTM D 1238
Temperature	200	°C	
Load	5	kg	
Mold shrinkage, MD	0.003	mm/mm	ASTM D 955
Mold shrinkage, TD	0.003	mm/mm	ASTM D 955
Mechanical Properties	Value	Unit	Standard
Tensile modulus	2400	MPa	ISO 527
Yield stress	41	MPa	ISO 527
Stress at break	35	MPa	ISO 527
Strain at break	14	%	ISO 527
Poisson's ratio	0.35		ISO 527
Flexural modulus, 23°C	2100	MPa	ISO 178
Flexural strength	59	MPa	ISO 178
Charpy notched impact strength, +23°C	28	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C	24	kJ/m ²	ISO 180/1A
Rockwell hardness	R 108		ISO 2039-2
Tensile modulus	2000	MPa	ASTM D 638
Tensile strength at yield	40	MPa	ASTM D 638
Tensile strength at break	44	MPa	ASTM D 638

STAREX SD-0150 U

Lotte Chemical Corporation

Mechanical Properties	Value	Unit	Standard
Elongation at break	15	%	ASTM D 638
Flexural modulus	2100	MPa	ASTM D 790
Flexural strength	58	MPa	ASTM D 790
Rockwell hardness	R 108		ASTM D 785
Izod impact notched, 1/8 in	280	J/m	ASTM D 256
Izod impact notched, 1/4 in	240	J/m	ASTM D 256
Thermal Properties	Value	Unit	Standard
Temp. of deflection under load, 1.80 MPa	78	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	91	°C	ISO 75-1/-2
Vicat softening temperature, B	98	°C	ISO 306
DTUL @ 66 psi	95	°C	ASTM D 648
DTUL @ 264 psi	83	°C	ASTM D 648
Other Properties	Value	Unit	Standard
Density	1040	kg/m ³	ISO 1183
Density	1040	kg/m ³	ASTM D 792
Processing Recommendation Injection Molding	Value	Unit	Standard
Pre-drying - temperature	80	°C	
Pre-drying - time	2 - 4	h	
Processing humidity	≤0.05	%	
Melt temperature	230	°C	
Mold temperature	40 - 80	°C	
Zone 1	160 - 180	°C	
Zone 2	190 - 200	°C	
Zone 3	210 - 220	°C	
Nozzle temperature	230	°C	
Screw speed	50 - 150	rpm	
Injection pressure	49 - 150	MPa	
Back pressure	0.5 - 2	MPa	