

NORYL PPXTM RESIN PPX7200U

REGION AMERICAS

DESCRIPTION

PP+PPE+PS. UV-stabilized. Improved chemical resistance and surface aesthetics in injection molded applications. NSF61/UL94 listings pending.

TYPICAL PROPERTY VALUES

Revision 20181012

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	33	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	27	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	10	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	130	%	ASTM D 638
Tensile Modulus, 50 mm/min	1240	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	48	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1440	MPa	ASTM D 790
Tensile Stress, yield, 50 mm/min	34	MPa	ISO 527
Tensile Stress, break, 50 mm/min	28	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	8.2	%	ISO 527
Tensile Strain, break, 50 mm/min	115	%	ISO 527
Tensile Modulus, 1 mm/min	1670	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	48	MPa	ISO 178
Flexural Modulus, 2 mm/min	1600	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1441	J/m	ASTM D 4812
Izod Impact, notched, 23°C	149	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	36	J	ASTM D 3763
Izod Impact, unnotched 80°10°4 +23°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80°10°4 -30°C	NB	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10°4 +23°C	14	kJ/m ²	ISO 180/1A
Izod Impact, notched 80°10°4 -30°C	8	kJ/m ²	ISO 180/1A
Charpy 23°C, V-notch Edgew 80°10°4 sp=62mm	12	kJ/m ²	ISO 179/1eA
Charpy -30°C, V-notch Edgew 80°10°4 sp=62mm	6	kJ/m ²	ISO 179/1eA
Charpy 23°C, Unnotch Edgew 80°10°4 sp=62mm	NB	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80°10°4 sp=62mm	80	kJ/m ²	ISO 179/1eU
THERMAL			
Vicat Softening Temp, Rate B/50	146	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	110	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	71	°C	ASTM D 648
CTE, -40°C to 40°C, flow	9.9E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.08E-04	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	103	°C	ISO 306
Vicat Softening Temp, Rate B/120	107	°C	ISO 306

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
PHYSICAL			
Specific Gravity	0.99	-	ASTM D 792
Mold Shrinkage on Tensile Bar, flow	0.6 – 0.8	%	SABIC method
Mold Shrinkage, flow, 3.2 mm	0.6 – 0.8	%	SABIC method
Mold Shrinkage, xflow, 3.2 mm	0.6 – 0.8	%	SABIC method
Melt Flow Rate, 260°C/5.0 kgf	16	g/10 min	ASTM D 1238
Density	0.99	g/cm ³	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	18	cm ³ /10 min	ISO 1133
INJECTION MOLDING			
Drying Temperature	60 – 65	°C	
Drying Time	2 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	260 – 290	°C	
Nozzle Temperature	260 – 290	°C	
Front - Zone 3 Temperature	250 – 290	°C	
Middle - Zone 2 Temperature	240 – 280	°C	
Rear - Zone 1 Temperature	225 – 275	°C	
Mold Temperature	30 – 50	°C	
Back Pressure	0.3 – 0.7	MPa	
Screw Speed	20 – 100	rpm	
Shot to Cylinder Size	30 – 70	%	
Vent Depth	0.038 – 0.051	mm	

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