

Product Texts

NORYL PPX7115PF resin is a non-reinforced alloy of polyphenylene ether (PPE) + polypropylene (PP). This FDA certified injection moldable grade exhibits high impact resistance and good heat resistance along with hydrolytic and dimensional stability. Target application of NORYL PPX7115PF is food contact water management component requiring high impact, chemical resistance and good heat performance.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	16	g/10min	ASTM D 1238
Temperature	260	°C	-
Load	5	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	Test Standard
ISO Data			
Tensile Modulus	1430	MPa	ISO 527
Yield stress	30	MPa	ISO 527
Strain at break	125	%	ISO 527
Flexural modulus, 23°C	1440	MPa	ISO 178
Flexural strength	46	MPa	ISO 178
Izod notched impact strength	37	kJ/m ²	ISO 180/1A
Temperature	8	°C	-
Tensile notched impact strength, +23°C	-30	kJ/m ²	ISO 8256/1
ASTM Data			
Tensile Modulus	1240	MPa	ASTM D 638
Tensile Strength at Yield	35	MPa	ASTM D 638
Tensile Strength at Break	34	MPa	ASTM D 638
Elongation at Yield	8	%	ASTM D 638
Elongation at Break	125	%	ASTM D 638
Flexural Modulus	1370	MPa	ASTM D 790
Flexural Strength	51	MPa	ASTM D 790
Izod Impact notched, 1/8 in	534	J/m	ASTM D 256
Izod Impact notched, 1/4 in	81	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	-30	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	82	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	110	°C	ISO 75-1/-2
Vicat softening temperature, A	131	°C	ISO 306
ASTM Data			
Coefficient of Thermal Expansion, MD	78	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	130	E-6/K	ASTM D 696
DTUL @ 66 psi	111	°C	ASTM D 648
DTUL @ 264 psi	84	°C	ASTM D 648
Vicat Temperature	83	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Density	990	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	60 - 65	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-

Mold temperature	30 - 50	°C	-
Zone 1	225 - 275	°C	-
Zone 2	240 - 280	°C	-
Zone 3	250 - 290	°C	-
Nozzle temperature	260 - 290	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

High impact or impact modified, Heat stabilized or stable to heat

Chemical Resistance

Hydrolytically Stable

Certifications

Food contact, Food approval FDA 21 CFR

Regional Availability

North America, Europe, Asia Pacific, South and Central America