

Product Texts

NORYL PKN4775 resin is a non-reinforced, opaque blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This high heat, thin wall extrusion and injection moldable grade is an improved version of NORYL PKN4736 resin and exhibits modulus at elevated temperature and good chemical resistance. NORYL PKN4775 resin is an excellent candidate for applications in high performance packaging. *See NORYL PKN4775F resin for FDA food compliant version.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	15.3	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2120	MPa	ISO 527
Yield stress	51	MPa	ISO 527
Yield strain	4.1	%	ISO 527
Stress at break	47	MPa	ISO 527
Strain at break	29.3	%	ISO 527
Flexural modulus	2160	MPa	ISO 178
Charpy notched impact strength, +23°C	19	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	20	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	11	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	2120	MPa	ASTM D 638
Tensile Strength at Yield	51	MPa	ASTM D 638
Tensile Strength at Break	47	MPa	ASTM D 638
Elongation at Yield	5.1	%	ASTM D 638
Elongation at Break	35	%	ASTM D 638
Flexural Modulus	2210	MPa	ASTM D 790
Izod Impact notched, 1/8 in	268	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	161	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	122	°C	ISO 75-1/-2
Vicat softening temperature, B	142	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	144	°C	ISO 306
ASTM Data			
DTUL @ 66 psi	138	°C	ASTM D 648
DTUL @ 264 psi	122	°C	ASTM D 648
Vicat Temperature	142	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.25	%	Sim. to ISO 62
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1050	kg/m ³	ISO 1183
Density	1050	kg/m ³	ASTM D 792

Characteristics

NORYL™ Resin PKN4775 - Americas

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Processing

Sheet Extrusion

Regional Availability

North America

Chemical Resistance

General Chemical Resistance