

Product Texts

NORYL™ PX9406P resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of 5VA at 2.5mm and V0 at 0.75mm. NORYL PX9406P is VDE certified IEC60335 and offers strong electrical performance at thin wall, high heat resistance, Low Warp, low moisture absorption, and dimensional stability. This material is an excellent candidate for unattended appliance applications such as printed circuit board (PCB) holders, terminal blocks + connectors, circuit protection / relay / switches, motor end caps, control box / panels, and battery charger / fuse holders where VDE IEC60335 is required.

UL Yellow Card Link [E121562-101325735](https://www.ul.com/yellow-card/E121562-101325735)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	10	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	73	MPa	ISO 527
Yield strain	4.5	%	ISO 527
Stress at break	55	MPa	ISO 527
Strain at break	8	%	ISO 527
Flexural modulus	2500	MPa	ISO 178
Charpy notched impact strength, +23°C	11	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	8	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	10	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	6	kJ/m ²	ISO 180/1A

ASTM Data			
Tensile Modulus	2800	MPa	ASTM D 638
Tensile Strength at Yield	76	MPa	ASTM D 638
Tensile Strength at Break	55	MPa	ASTM D 638
Elongation at Yield	4.7	%	ASTM D 638
Elongation at Break	9.7	%	ASTM D 638
Flexural Modulus	2840	MPa	ASTM D 790
Izod Impact notched, 1/8 in	140	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	60	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	117	°C	ISO 75-1/-2
Vicat softening temperature, 120°C/h 10N	150	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
Burning behav. at thickness h	V-2	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VB	class	IEC 60695-11-20
Thickness tested	2.0	mm	-
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	775	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 264 psi	118	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			

NORYL™ Resin PX9406P - Americas
(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

Comparative tracking index	250	-	IEC 60112
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Other properties	Value	Unit	Test Standard
Density	1100	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	105 - 110	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	275 - 305	°C	-
Mold temperature	70 - 100	°C	-
Zone 1	245 - 295	°C	-
Zone 2	255 - 300	°C	-
Zone 3	265 - 305	°C	-
Screw speed	20 - 100	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant

Additives

Flame retarding agent

Regional Availability

North America