SABIC Innovative Plastics™

Noryl* Resin PX4605

Americas: COMMERCIAL

PPE+PS blend. 20% Glass reinforced. High heat. Dimensional stability. Suitable for automotive and E/E applications.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	112	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	110	MPa	ASTM D 638
Tensile Strain, yield	2.4	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	7560	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	170	MPa	ASTM D 790
Flexural Stress, yld, 2.6 mm/min, 100 mm span	148	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	5520	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	5240	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	110	J/m	ASTM D 256
Izod Impact, notched, -40°C	100	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	20	J	ASTM D 3763
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	160	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	154	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	154	°C	ASTM D 648
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.21	-	ASTM D 792
Water Absorption, 24 hours	0.1	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.2 - 0.4	%	SABIC Method
Density	1.24	g/cm³	ISO 1183

Source GMD, last updated:09/06/2004

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	110 - 120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	300 - 325	°C
Nozzle Temperature	300 - 325	°C
Front - Zone 3 Temperature	290 - 325	°C
Middle - Zone 2 Temperature	275 - 320	°C
Rear - Zone 1 Temperature	265 - 315	°C
Mold Temperature	80 - 110	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	20 - 100	rpm

Shot to Cylinder Size	30 - 70	%

Source GMD, last updated:09/06/2004

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.