

Noryl* Resin PX5558

Americas: COMMERCIAL

30% glass reinforced, high flow PPO.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 5 mm/min	108	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.5	%	ASTM D 638
Tensile Modulus, 5 mm/min	7750	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	162	MPa	ASTM D 790
Flexural Stress, brk, 2.6 mm/min, 100 mm span	131	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	8340	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	7170	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	261	J/m	ASTM D 4812
Izod Impact, notched, 23°C	90	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	14	J	ASTM D 3763
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	130	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	129	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	121	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.98E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.66E-05	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.28	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.1 - 0.2	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm	0.2 - 0.4	%	SABIC Method
Melt Flow Rate, 280°C/5.0 kgf	19.6	g/10 min	ASTM D 1238

Source GMD, last updated:09/08/1999

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	100 - 105	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	270 - 300	°C
Nozzle Temperature	270 - 300	°C
Front - Zone 3 Temperature	260 - 300	°C
Middle - Zone 2 Temperature	250 - 295	°C
Rear - Zone 1 Temperature	240 - 290	°C
Mold Temperature	65 - 95	°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

Source GMD, last updated:09/08/1999

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.

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