SABIC Innovative Plastics™

Noryl PPX* Resin PPX7110

Americas: COMMERCIAL

PPE+PP blend. High Impact, Good Heat Resistance

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	35	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	32	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min	6.5	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	195	%	ASTM D 638
Tensile Modulus, 50 mm/min	1340	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	51	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	1550	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	437	J/m	ASTM D 256
Izod Impact, notched, -30°C	149	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	37	J	ASTM D 3763
Instrumented Impact Total Energy, -30°C	27	J	ASTM D 3763
THERMAL	Value	Unit	Standard
Vicat Softening Temp, Rate B/50	138	°C	ASTM D 1525
HDT, 0.45 MPa, 3.2 mm, unannealed	113	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	77	°C	ASTM D 648
CTE, -40°C to 40°C, flow	8.1E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	1.12E-04	1/°C	ASTM E 831
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL	Value	Unit	Standard
Specific Gravity	0.97	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm	0.8 - 1.2	%	SABIC Method
Melt Flow Rate, 260°C/5.0 kgf	10.6	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.52	mm	UL 94

Source GMD, last updated:02/20/2001

Processing

• No drying is required if extruder is vented. Melt temperature is measurement of the melt exiting the die.

Parameter		
Injection Molding	Value	Unit
Drying Temperature	60 - 65	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	260 - 290	°C
Nozzle Temperature	260 - 290	°C

Front - Zone 3 Temperature	250 - 290	°C
Middle - Zone 2 Temperature	240 - 280	°C
Rear - Zone 1 Temperature	225 - 275	°C
Mold Temperature	30 - 50	°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

Parameter Sheet Extrusion	Value	Unit
Drying Temperature	60 - 65	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	4	hrs
Melt Temperature	270 - 280	°C
Barrel - Zone 1 Temperature	145 - 155	°C
Barrel - Zone 2 Temperature	255 - 265	°C
Barrel - Zone 3 Temperature	270 - 280	°C
Barrel - Zone 4 Temperature	270 - 280	°C
Adapter Temperature	265 - 270	°C
Die Temperature	265 - 270	°C

Source GMD, last updated:02/20/2001

• Melt temperatures below 270°C (520°F) may result in slight surface texture on thermoformed parts.
• It is recommended that sheet be cured 24 hrs prior to thermoforming.

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.