

Noryl* Resin PX0844

Americas: COMMERCIAL

PPE+PS blend. Unfilled. UL94 HB rated. Low water absorption. Hydrolytic stability. Dimensional stability.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	49	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min	44	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	27	%	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	3	%	ASTM D 638
Tensile Modulus, 5 mm/min	2290	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	80	MPa	ASTM D 790
Flexural Stress, yld, 2.6 mm/min, 100 mm span	75	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	2550	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2240	MPa	ASTM D 790
Hardness, Rockwell R	114	-	ASTM D 785
Tensile Stress, yield	47	MPa	ISO 527
Tensile Stress, break	43	MPa	ISO 527
Tensile Strain, yield	2.9	%	ISO 527
Tensile Strain, break	43	%	ISO 527
Tensile Modulus, 1 mm/min	2350	MPa	ISO 527
Flexural Stress	78	MPa	ISO 178
Flexural Modulus	2400	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	234	J/m	ASTM D 256
Izod Impact, notched, -30°C	175	J/m	ASTM D 256
Izod Impact, notched, -40°C	133	J/m	ASTM D 256
Instrumented Impact Total Energy, 23°C	40	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	17	kJ/m ²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	10	kJ/m ²	ISO 180/1A
Charpy Impact, notched, 23°C	17	kJ/m ²	ISO 179/2C
Charpy Impact, notched, -30°C	10	kJ/m ²	ISO 179/2C
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	120	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	105	°C	ASTM D 648
HDT, 0.45 MPa, 6.4 mm, unannealed	121	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	112	°C	ASTM D 648
CTE, 0°C to 100°C, flow	7.38E-05	1/°C	ASTM E 831
Vicat Softening Temp, Rate B/50	125	°C	ISO 306
Vicat Softening Temp, Rate B/120	128	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	122	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	107	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.06	-	ASTM D 792
Water Absorption, 24 hours	0.1	%	ASTM D 570

Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
Melt Flow Rate, 280°C/5.0 kgf	13.7	g/10 min	ASTM D 1238

Source GMD, last updated:01/05/2000

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	105 - 110	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	275 - 305	°C
Nozzle Temperature	275 - 305	°C
Front - Zone 3 Temperature	265 - 305	°C
Middle - Zone 2 Temperature	255 - 300	°C
Rear - Zone 1 Temperature	245 - 295	°C
Mold Temperature	70 - 100	°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:01/05/2000

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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