

## Noryl\* Resin WCP700

Americas: COMMERCIAL

Flexible PPE-TPE injection grade suitable for over-molding applications such as plugs, strain relief's, and connectors. Good processability. 70 Shore A hardness.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, brk, Type I, 50 mm/min	5	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	>400	%	ASTM D 638
Flexural Modulus, 12.5 mm/min, 100 mm span	50	MPa	ASTM D 790
Hardness, Shore A, 30S reading	70	-	ASTM D 2240
Tensile Stress, break, 50 mm/min	4	MPa	ISO 527
Tensile Strain, break, 50 mm/min	>400	%	ISO 527
Flexural Modulus, 12.5 mm/min	50	MPa	ISO 178
Tear strength	46	N/mm	ISO 6383
IMPACT	Value	Unit	Standard
Brittleness Temperature	<-40	°C	ASTM D 746
PHYSICAL	Value	Unit	Standard
Specific Gravity	0.93	-	ASTM D 792
Water Absorption, 23°C/48hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.48	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.33	%	ASTM D 955
Melt Flow Rate, 200°C/5.0 kgf	10	g/10 min	ASTM D 1238
Melt Flow Rate, 210°C/5 kgf	17	g/10 min	ASTM D 1238
ELECTRICAL	Value	Unit	Standard
Volume Resistivity	1.7E+16	Ohm-cm	IEC 60093
Dielectric strength in oil, 2.0mm	26	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	2.4	-	IEC 60250
Relative Permittivity, 1 MHz	2.4	-	IEC 60250
Dissipation Factor, 50/60 Hz	0.037	-	IEC 60250
Dissipation Factor, 1 MHz	0.0005	-	IEC 60250
Comparative Tracking Index	600	V	IEC 60112

Source GMD, last updated:06/27/2005

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	60 - 80	°C
Drying Time	4 - 6	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.01	%
Melt Temperature	220 - 250	°C
Nozzle Temperature	220 - 250	°C
Front - Zone 3 Temperature	220 - 250	°C
Middle - Zone 2 Temperature	210 - 240	°C

Rear - Zone 1 Temperature	180 - 220	°C
Mold Temperature	40 - 60	°C
Back Pressure	3 - 10	MPa
Screw Speed	30 - 80	rpm
Shot to Cylinder Size	30 - 70	%
Vent Depth	0.03 - 0.05	mm

Source GMD, last updated:06/27/2005

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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