NORYL™ Resin WCP841
Asia Pacific: COMMERCIAL

Flexible Noryl* injection molding grade. Low specific gravity with good non-halogenated flame retardant performance. Developed for evaluation in overmolding applications such as plugs, strain reliefs, and connectors. UL 94 V-0 performance with good processability.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 50 mm/min	60	kgf/cm²	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	150	%	ASTM D 638
Flexural Modulus, 12.5 mm/min, 100 mm span	500	kgf/cm²	ASTM D 790
Hardness, Shore A, 30S reading	84	-	ASTM D 2240
Tensile Stress, break, 50 mm/min	7	MPa	ISO 527
Tensile Strain, break, 50 mm/min	175	%	ISO 527
Flexural Modulus, 12.5 mm/min	50	MPa	ISO 178
IMPACT			
Brittleness Temperature	<-40	°C	ASTM D 746
PHYSICAL			
Specific Gravity	1.01	-	ASTM D 792
Mold Shrinkage, flow, 24 hrs (5)	0.95	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.75	%	ASTM D 955
Melt Flow Rate, 210°C/5 kgf	24	g/10 min	ASTM D 1238
Melt Flow Rate, 250°C/2.16 kgf	27	g/10 min	ASTM D 1238
ELECTRICAL			
Volume Resistivity	7.1E+15	Ohm-cm	ASTM D 257
Comparative Tracking Index	600	V	IEC 60112
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	6	mm	UL 94
Glow Wire Flammability Index 750°C, passes at	3	mm	IEC 60695-2-12
Glow Wire Ignitability Temperature, 3.0 mm	750	°C	IEC 60695-2-13

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PROCESSING PARAMETERS	TYPICAL 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