NORYL™ RESIN EM6101

REGION AMERICAS

DESCRIPTION

NORYL™ EM6101 is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This grade has improved flow characteristics and overall processing economy with a heat deflection temperature (HDT) of 123c and good property retention over a wide temperature range. NORYL EM6101 resin is an excellent candidate for automotive interior applications.

TYPICAL PROPERTY VALUES

Revision 20190301

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 50 mm/min	53	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	50	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	81	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2300	MPa	ASTM D 790
IMPACT			
Izod Impact, notched, 23°C	320	J/m	ASTM D 256
Izod Impact, notched, -40°C	160	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	53	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	25	J	ASTM D 3763
THERMAL			
HDT, 0.45 MPa, 6.4 mm, unannealed	123	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	121	°C	ASTM D 648
CTE, 0°C to 100°C, flow	9.36E-05	1/°C	ASTM E 831
PHYSICAL			
Specific Gravity	1.05	-	ASTM D 792
Water Absorption, 24 hours	0.2	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 – 0.7	%	SABIC method
INJECTION MOLDING			
Drying Temperature	95 – 105	°C	
Drying Time	3 – 4	hrs	
Drying Time (Cumulative)	8	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	265 – 295	°C	
Nozzle Temperature	265 – 295	°C	
Front - Zone 3 Temperature	255 – 295	°C	
Middle - Zone 2 Temperature	245 – 290	°C	
Rear - Zone 1 Temperature	230 – 280	°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	

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