

NORYL™ RESIN PPO534

REGION ASIA

DESCRIPTION

NORYL PPO534 resin is a non-reinforced blend of polyphenylene ether (PPE) + polystyrene (PS). This high heat injection moldable grade exhibits high impact strength, dimensional stability, hydrolytic stability, and very low moisture absorption. This material is an excellent candidate for compounding applications.

GENERAL INFORMATION	
Features	Hydrolytic Stability, Low Warpage, Amorphous, Low Shrinkage, Low Moisture Absorption, Low Specific Gravity, Dimensional stability, No PFAS intentionally added
Fillers	Unreinforced
Polymer Types	Polyphenylene Ether + PS (PPE+PS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Electrical and Electronics	Electronic Components
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, yield	72	MPa	SABIC - Japan Method
Tensile Strain, break	55	%	SABIC - Japan Method
Flexural Stress	104	MPa	ASTM D790
Flexural Modulus	2590	MPa	ASTM D790
Hardness, Rockwell R	123	-	ASTM D785
IMPACT ⁽¹⁾			
Izod Impact, notched, 23°C	137	J/m	ASTM D256
THERMAL ⁽¹⁾			
HDT, 1.82 MPa, 6.4 mm, unannealed	160	°C	ASTM D648
CTE, -30°C to 30°C	5.00E-05	1/°C	TMA
PHYSICAL ⁽¹⁾			
Specific Gravity	1.08	-	ASTM D792
Water Absorption, (23°C/24hrs)	0.03	%	ASTM D570
Mold Shrinkage, flow, 3.2 mm ⁽²⁾	0.6 – 0.8	%	SABIC method
ELECTRICAL ⁽¹⁾			
Surface Resistivity	1.E+16	Ω	ASTM D257
Relative Permittivity, 50/60 Hz	2.58	-	ASTM D150
FLAME CHARACTERISTICS ⁽³⁾			
UL Recognized, 94V-1 Flame Class Rating	1.5	mm	UL 94
INJECTION MOLDING ⁽⁴⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Drying Temperature	100 – 120	°C	
Drying Time	3 – 4	Hrs	
Melt Temperature	290 – 320	°C	
Nozzle Temperature	280 – 310	°C	
Front - Zone 3 Temperature	290 – 320	°C	
Middle - Zone 2 Temperature	270 – 300	°C	
Rear - Zone 1 Temperature	260 – 280	°C	
Mold Temperature	80 – 120	°C	
Back Pressure	0.5 – 1.2	MPa	
Screw Speed	40 – 60	rpm	

- (1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.
- (2) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
- (3) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.
- (4) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

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