

## DuPont Performance Polymers Zytel® FE3734 NC010 Nylon 612 (Unverified Data\*\*)

Category : Polymer , Thermoplastic , Nylon , Nylon 612

### Material Notes:

Zytel® FE3734 NC010 is an unreinforced, lubricated polyamide 612 resin suitable for injection molding. Information provided by DuPont Performance Polymers

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_DuPont-Performance-Polymers-Zytel-FE3734-NC010-Nylon-612-nbspUnverified-Data.php](http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Zytel-FE3734-NC010-Nylon-612-nbspUnverified-Data.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.06 g/cc	1.06 g/cc	DAM; ASTM D792
Density	1.07 g/cc	0.0387 lb/in <sup>3</sup>	DAM; ISO 1183
Water Absorption	1.3 %	1.3 %	Equilibrium 50%RH; DAM; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	3.0 %	3.0 %	Saturation, immersed; DAM; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Linear Mold Shrinkage	0.011 cm/cm	0.011 in/in	Transverse; DAM
	@Thickness 3.20 mm	@Thickness 0.126 in	
	0.011 cm/cm	0.011 in/in	Flow; DAM
	@Thickness 3.20 mm	@Thickness 0.126 in	
Linear Mold Shrinkage, Flow	0.013 cm/cm	0.013 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Linear Mold Shrinkage, Transverse	0.014 cm/cm	0.014 in/in	DAM; ISO 294-4
	@Thickness 2.00 mm	@Thickness 0.0787 in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	114	114	DAM; ISO 2039/2
Tensile Strength	62.0 MPa	8990 psi	DAM; ASTM D638
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Strength, Yield	59.0 MPa	8560 psi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Break	38 %	38 %	DAM; nominal; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Mechanical Properties	Metric	English	Comments
	@Temperature 23.0 °C	@Temperature 73.4 °F	DAM; ASTM D638
Elongation at Yield	13 % @Temperature 23.0 °C	13 % @Temperature 73.4 °F	DAM; ISO 527
Tensile Modulus	2.40 GPa @Temperature 23.0 °C	348 ksi @Temperature 73.4 °F	DAM; ISO 527
Flexural Modulus	2.14 GPa @Temperature 23.0 °C	310 ksi @Temperature 73.4 °F	DAM; ASTM D790
	2.20 GPa @Temperature 23.0 °C	319 ksi @Temperature 73.4 °F	DAM; ISO 178
Izod Impact, Notched	0.370 J/cm @Temperature 23.0 °C	0.693 ft-lb/in @Temperature 73.4 °F	DAM; ASTM D256
Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	DAM; ISO 179/1eU
	NB @Temperature -30.0 °C	NB @Temperature -22.0 °F	DAM; ISO 179/1eU
Charpy Impact, Notched	0.480 J/cm <sup>2</sup> @Temperature 23.0 °C	2.28 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	DAM; ISO 179/1eA

Thermal Properties	Metric	English	Comments
Melting Point	218 °C	424 °F	DAM; ASTM D3418
	218 °C	424 °F	10°C/min; DAM; ISO 11357-1/-3
Deflection Temperature at 1.8 MPa (264 psi)	63.0 °C	145 °F	DAM; ISO 75-1/-2

Processing Properties	Metric	English	Comments
Melt Temperature	250 °C	482 °F	DAM; Optimum
	230 - 290 °C	446 - 554 °F	DAM
Mold Temperature	50.0 - 90.0 °C	122 - 194 °F	DAM
	70.0 °C	158 °F	DAM; optimum
Drying Temperature	80.0 °C	176 °F	DAM

Dry Time Processing Properties	2.00 - 4.00 hour Metric	2.00 - 4.00 hour English	DAM Comments
Moisture Content	<= 0.15 %	<= 0.15 %	DAM

Descriptive Properties	Value	Comments
Appearance	Natural Color	DAM
Drying Recommended	Yes, if moisture content of resin exceeds recommended level	DAM
Forms	Pellets	DAM
Generic	Nylon 612	DAM
Material Status	Current	DAM
Part Marking Code	>PA612<	ISO 11469; DAM
Polymer Family	Polyamide	DAM
Polymer Type	PA612	DAM
Processing Method	Injection Molding	DAM
Product Category	Unreinforced Resins	DAM
Region Available - Global	Yes	DAM
Resin Identification	PA612	ISO 1043; DAM
RoHS Compliance	Contact Manufacturer	DAM

## Contact Songhan Plastic Technology Co.,Ltd.

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