

DuPont Zytel® 103FHS

Unreinforced, Heat Stabilized, Polyamide 66

While this product line has been acquired by Celanese, this specific grade had been discontinued while still a DuPont product so it is listed here as a discontinued DuPont product.

Physical Properties	Metric	English	Comments
Linear Mold Shrinkage, Flow	0.014 cm/cm	0.014 in/in	DAM; ISO 294-4, 2577

Linear Mold Shrinkage, Transverse	0.013 cm/cm	0.013 in/in	DAM; ISO 294-4, 2577
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Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	85.0 MPa	12300 psi	DAM; ISO 527-1/-2

Elongation at Break	18 %	18 %	DAM; ISO 527-1/-2
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Elongation at Yield	4.5 %	4.5 %	DAM; ISO 527-1/-2
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Tensile Modulus	3.10 GPa	450 ksi	DAM; ISO 527-1/-2
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Flexural Modulus	2.80 GPa	406 ksi	DAM; ISO 178
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Poissons Ratio	0.37	0.37	DAM; ISO 527-1/-2
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Izod Impact, Notched (ISO)	300 kJ/m ² @Temperature 23.0 °C	143 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 180/1U
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Izod Impact, Unnotched (ISO)	5.50 kJ/m ² @Temperature 23.0 °C	2.62 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 180/1A
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Charpy Impact Unnotched	NB @Temperature 23.0 °C	NB @Temperature 73.4 °F	DAM; ISO 179/1eU
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Charpy Impact, Notched	0.500 J/cm ² @Temperature 23.0 °C	2.38 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 179/1eA
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Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	80.0 µm/m-°C	44.4 µin/in-°F	DAM; ISO 11359-1/-2

	80.0 µm/m-°C @Temperature -40.0 - 23.0 °C	44.4 µin/in-°F @Temperature -40.0 - 73.4 °F	DAM; ISO 11359-1/-2
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	120 µm/m-°C @Temperature 55.0 - 160 °C	66.7 µin/in-°F @Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
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CTE, linear, Transverse to Flow	80.0 µm/m-°C	44.4 µin/in-°F	DAM; ISO 11359-1/-2
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	80.0 µm/m-°C @Temperature -40.0 - 23.0 °C	44.4 µin/in-°F @Temperature -40.0 - 73.4 °F	DAM; ISO 11359-1/-2
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	180 µm/m-°C @Temperature 55.0 - 160 °C	100 µin/in-°F @Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
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Deflection Temperature at 0.46 MPa (66 psi)	200 °C	392 °F	DAM; ISO 75-1/-2
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Deflection Temperature at 1.8 MPa (264 psi)	70.0 °C	158 °F	DAM; ISO 75-1/-2
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Flammability, UL94	V-2 @Thickness 0.710 mm	V-2 @Thickness 0.0280 in	DAM; IEC 60695-11-10
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	V-2 @Thickness 1.50 mm	V-2 @Thickness 0.0591 in	DAM; IEC 60695-11-10
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