

# DuPont™ Zytel® HTN52G45HSL BK083

## HIGH PERFORMANCE POLYAMIDE RESIN

### Product Information

Zytel® HTN high performance polyamide resins feature high retention of properties upon exposure to elevated temperature, to high moisture, and to harsh chemical environments. Polymer families and grades of Zytel® HTN are tailored to optimize performance as well as processability.

Typical applications with Zytel® HTN include demanding applications in the automotive, electrical and electronics, domestic appliances, and construction industries.

**Zytel® HTN52G45HSL BK083 is a 45% glass reinforced, heat stabilized, lubricated high performance polyamide resin that can be molded in water heated molds. It is also a PPA resin.**

General information	Value	Unit	Test Standard
Resin Identification	PA6T/66-GF45	-	ISO 1043
Part Marking Code	PA6T/66-GF45	-	ISO 11469
Part Marking Code	>PPA-GF45<	-	SAE J1344
Mechanical properties	dry / cond	Unit	Test Standard
Tensile Modulus	15500 / -	MPa	ISO 527-1/-2
Stress at break	235 / -	MPa	ISO 527-1/-2
Strain at break	2 / -	%	ISO 527-1/-2
Charpy impact strength, 73°F	65 / -	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 73°F	12 / -	kJ/m <sup>2</sup>	ISO 179/1eA
Flammability	Value	Unit	Test Standard
FMVSS Class	B	-	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	17	mm/min	ISO 3795 (FMVSS 302)
Other properties	dry / cond	Unit	Test Standard
Density	1560 / -	kg/m <sup>3</sup>	ISO 1183
Injection	Value	Unit	Test Standard
Drying Recommended	yes	-	-
Drying Temperature	100	°C	-
Drying Time, Dehumidified Dryer	6 - 8	h	-
Processing Moisture Content	≤0.1	%	-
Melt Temperature Optimum	325	°C	-
Min. melt temperature	320	°C	-
Max. melt temperature	330	°C	-
Min. mold temperature	90	°C	-
Max. mold temperature	110	°C	-

### Characteristics

Processing	<ul style="list-style-type: none"> <li>Injection Molding</li> </ul>
Special characteristics	<ul style="list-style-type: none"> <li>Heat stabilized or stable to heat</li> </ul>
Regional Availability	<ul style="list-style-type: none"> <li>North America</li> <li>Europe</li> <li>Asia Pacific</li> <li>South and Central America</li> <li>Near East/Africa</li> <li>Global</li> </ul>

### Processing Texts

#### Injection molding

During molding, use proper protective equipment and adequate ventilation. Avoid exposure to fumes and limit the hold up time and temperature of the resin in the machine. Purge degraded resin carefully with HDPE.

To find out more, visit [DuPont Performance Polymers](#) or contact nearest DuPont location.

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Toll-Free (USA): 800 441-0575

#### Asia Pacific

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#### Europe/Middle East/Africa

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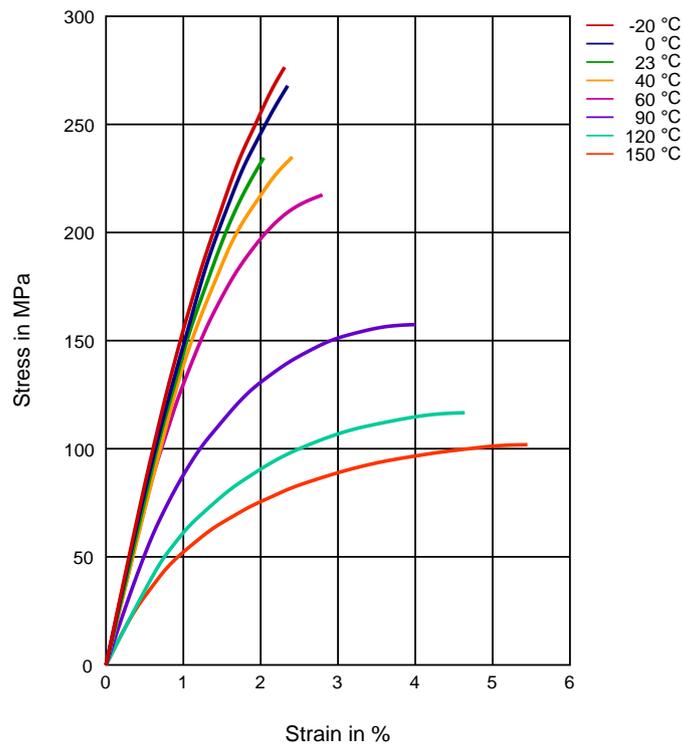


# DuPont™ Zytel® HTN52G45HSL BK083

## HIGH PERFORMANCE POLYAMIDE RESIN

Diagrams

Stress-strain (dry)



Revised: 2016-10-05

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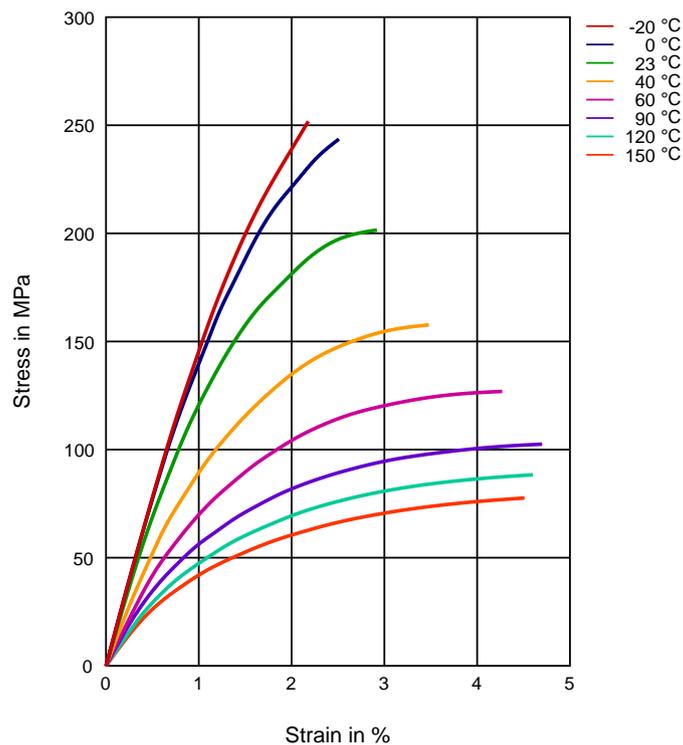
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# DuPont™ Zytel® HTN52G45HSL BK083

## HIGH PERFORMANCE POLYAMIDE RESIN

Stress-strain (cond.)



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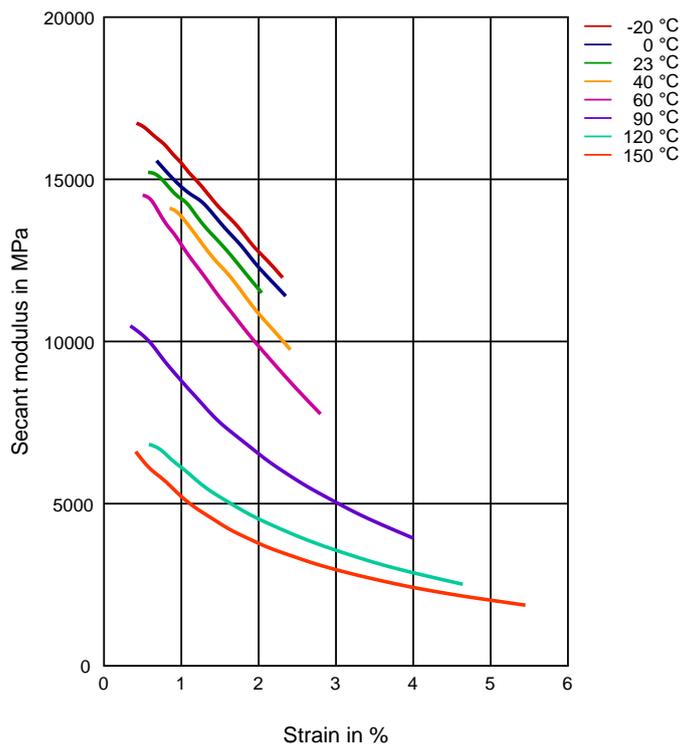


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# DuPont™ Zytel® HTN52G45HSL BK083

## HIGH PERFORMANCE POLYAMIDE RESIN

Secant modulus-strain (dry)



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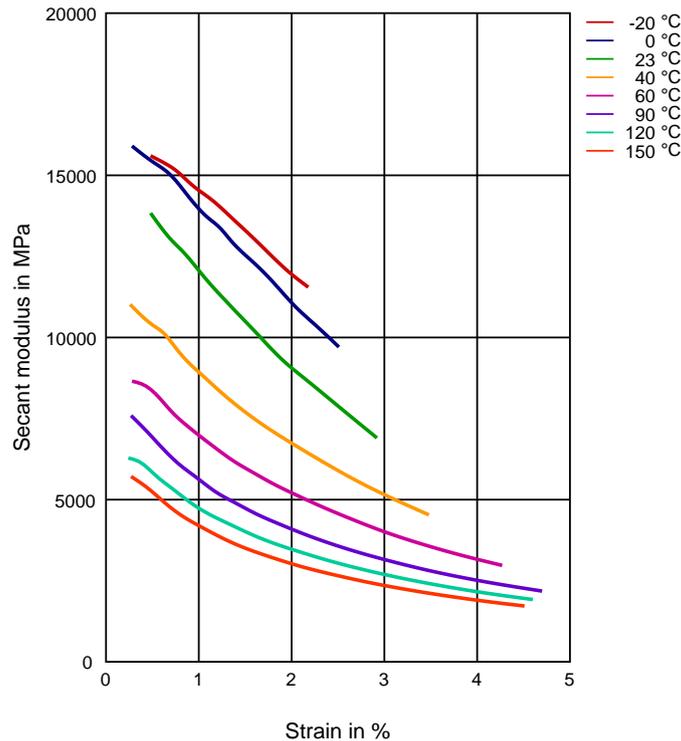
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## HIGH PERFORMANCE POLYAMIDE RESIN

Secant modulus-strain (cond.)



Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc. ISO Mechanical properties measured at 160 mil (Hytrel® measured at 80 mil), IEC Electrical properties measured at 80 mil, all ASTM properties measured at 120 mil, and test temperatures are 73°F unless otherwise stated.

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