

# Rynite® 530HTE BK503

## THERMOPLASTIC POLYESTER RESIN

Rynite® 530HTE BK503 is a 30% glass reinforced modified polyethylene terephthalate resin with excellent high temperature dielectric properties

### Product information

Resin Identification	PET-GF30	ISO 1043
Part Marking Code	>PET-GF30<	ISO 11469

### Rheological properties

Moulding shrinkage, parallel	0.1 %	ISO 294-4, 2577
Moulding shrinkage, normal	0.6 %	ISO 294-4, 2577
Postmoulding shrinkage, normal, 48h at 80°C	0.45 %	ISO 294-4
Postmoulding shrinkage, parallel, 48h at 80°C	0.1 %	ISO 294-4

### Typical mechanical properties

Tensile modulus	11000 MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	160 MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	1.9 %	ISO 527-1/-2
Compressive strength	230 MPa	ISO 604
Charpy impact strength, 23°C	42 kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, 23°C	8.9 kJ/m <sup>2</sup>	ISO 179/1eA
Hardness, Rockwell, R-scale	120	ISO 2039-2
Ball indentation hardness, H 961/30	221 MPa	ISO 2039-1
Poisson's ratio	0.34	

### Thermal properties

Melting temperature, 10°C/min	252 °C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	90 °C	ISO 11357-1/-3
Temperature of deflection under load, 1.8 MPa	230 °C	ISO 75-1/-2
Temperature of deflection under load, 0.45 MPa	251 °C	ISO 75-1/-2
Thermal conductivity, flow	0.29 W/(m K)	ISO 22007-2

### Flammability

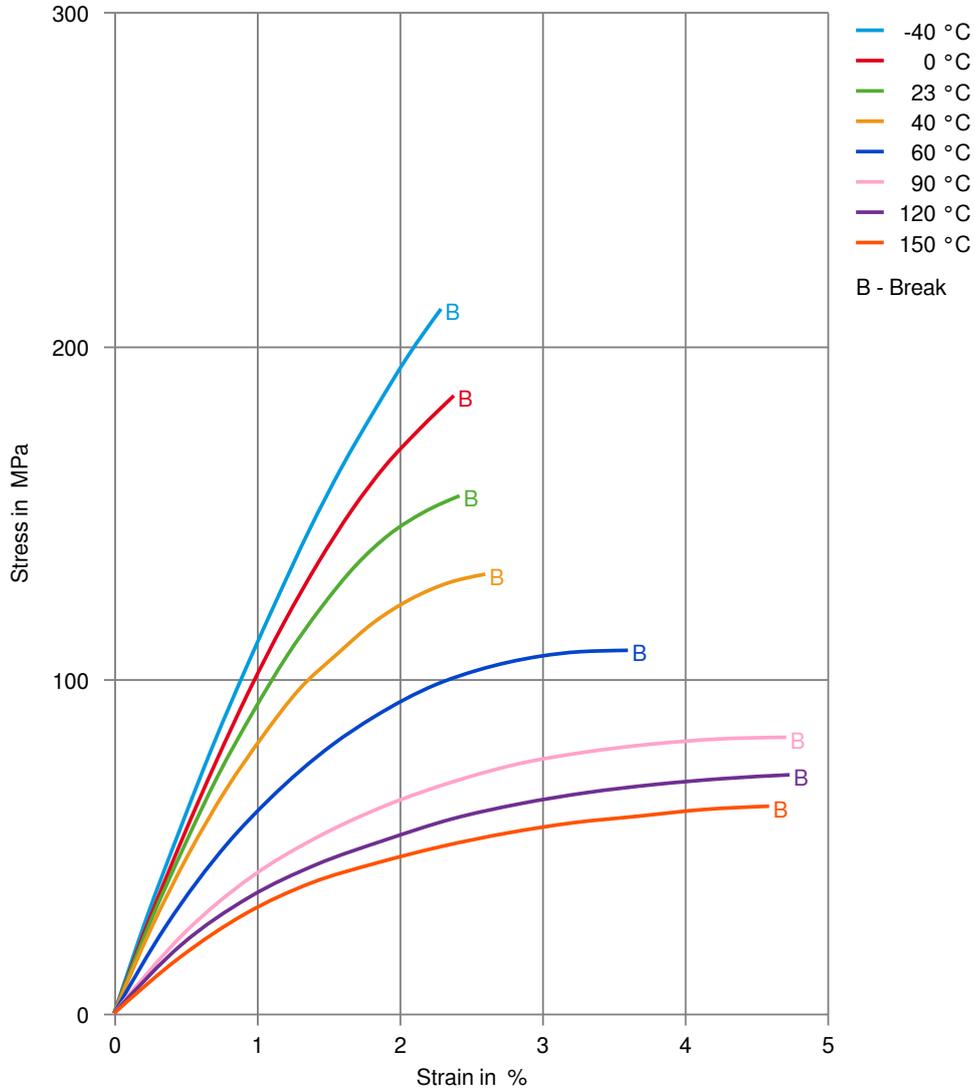
Glow Wire Flammability Index, 3.0mm	800 °C	IEC 60695-2-12
Glow Wire Ignition Temperature, 3.0mm	775 °C	IEC 60695-2-13
Glow Wire Temperature, No Flame, 1mm	750 °C	IEC 60335-1
Glow Wire Temperature, No Flame, 1.5mm	750 °C	IEC 60335-1
Glow Wire Temperature, No Flame, 2mm	750 °C	IEC 60335-1
Glow Wire Temperature, No Flame, 3mm	825 °C	IEC 60335-1
FMVSS Class	B	ISO 3795 (FMVSS 302)
Burning rate, Thickness 1 mm	<80 mm/min	ISO 3795 (FMVSS 302)



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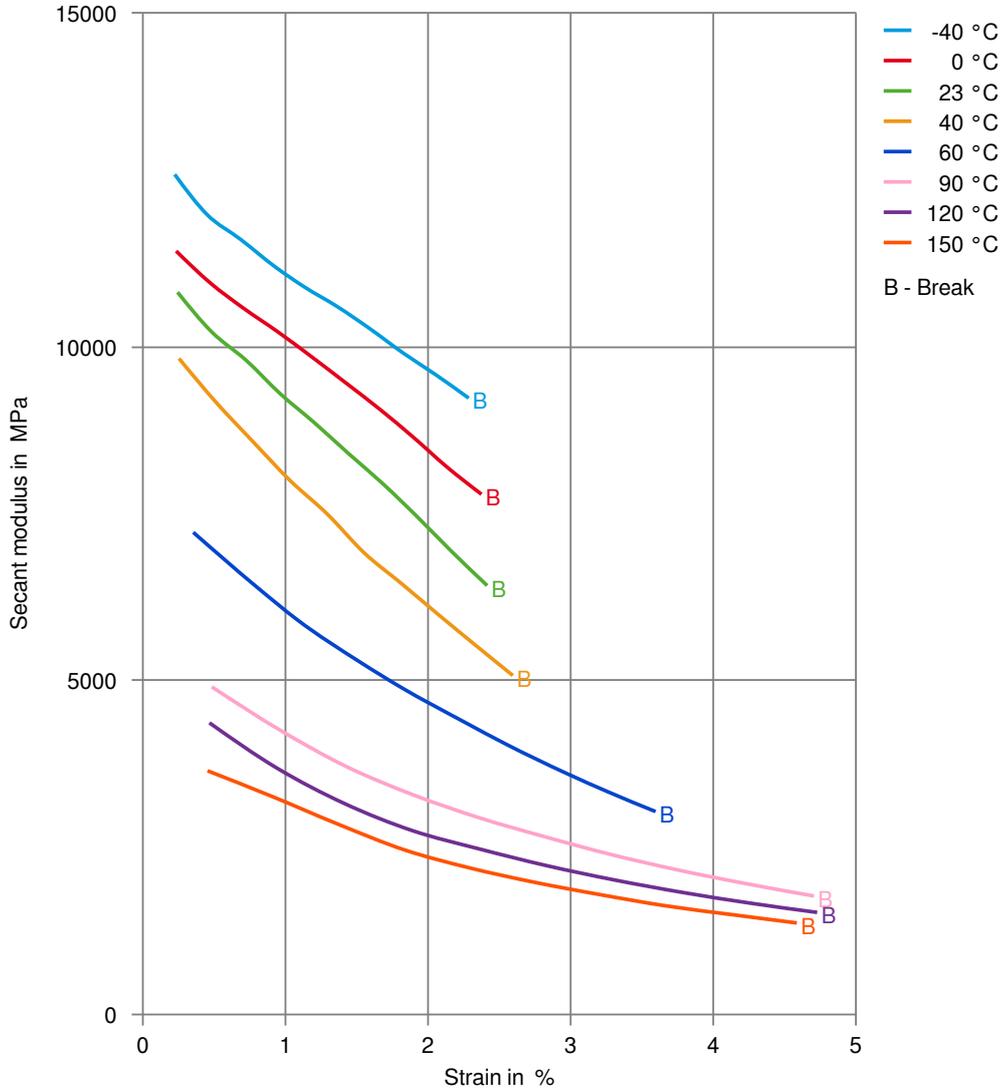
Stress-strain  
(measured on Rynite® 530 NC010)



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THERMOPLASTIC POLYESTER RESIN

Secant modulus-strain  
(measured on Rynite® 530 NC010)



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