

# PIBITER NRV230AE

## Product information

Part Marking Code	PBT-GF30 FR(17)	ISO 11469
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## Typical mechanical properties

Tensile Modulus	11000 MPa	ISO 527-1/-2
Stress at break, 5mm/min	120 MPa	ISO 527-1/-2
Strain at break, 5mm/min	2 %	ISO 527-1/-2
Flexural Modulus	10400 MPa	ISO 178
Flexural Strength	200 MPa	ISO 178

## Thermal properties

Temp. of deflection under load, 1.8 MPa	213 °C	ISO 75-1/-2
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## Flammability

Burning Behav. at thickness h	V-0 class	UL 94
Thickness tested	0.75 mm	UL 94
UL recognition	yes	UL 94

## Other properties

Humidity absorption, 2mm	0.15 %	Sim. to ISO 62
Density	1700 kg/m <sup>3</sup>	ISO 1183

## Characteristics

Additives	Flame retardant
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## Additional information

Injection molding	Rear Temperature 450-470(230-240) deg F (deg C) Center Temperature 460-480(235-250) deg F (deg C) Front Temperature 470-490(240-255) deg F (deg C) Nozzle Temperature 480-490(250-255) deg F (deg C) Melt Temperature 460-490(235-255) deg F (deg C) Mold Temperature 150-200(65-93) deg F (deg C) Back Pressure 0-50 psi Screw Speed Medium Injection Speed Fast
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Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades.



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## Processing Texts

### Pre-drying

To avoid hydrolytic degradation during processing, Pibiter resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints  $< -40^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$ ) at  $250^{\circ}\text{F}$  ( $121^{\circ}\text{C}$ ) for 4 hours.

### Longer pre-drying times/storage

For subsequent storage of the material in the dryer until processed ( $\leq 60$  h) it is necessary to lower the temperature to  $100^{\circ}\text{C}$ .

### Injection molding

Rear Temperature 450-470(230-240) deg F (deg C)  
Center Temperature 460-480(235-250) deg F (deg C)  
Front Temperature 470-490(240-255) deg F (deg C)  
Nozzle Temperature 480-490(250-255) deg F (deg C)  
Melt Temperature 460-490(235-255) deg F (deg C)  
Mold Temperature 150-200(65-93) deg F (deg C)  
Back Pressure 0-50 psi  
Screw Speed Medium  
Injection Speed Fast

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades.

### Injection molding Preprocessing

To avoid hydrolytic degradation during processing, Pibiter resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints  $< -30^{\circ}\text{F}$  ( $-34^{\circ}\text{C}$ ) at  $250^{\circ}\text{F}$  ( $121^{\circ}\text{C}$ ) for 4 hours..

