Celanese
The chemistry inside innovation™

COOLPOLY® E3617

COOLPOLY®

Product information

Resin Identification	PA6	ISO 1043
Part Marking Code	>PA6<	ISO 11469

Typical mechanical properties

Tensile modulus	10500	MPa	ISO 527-1/-2
Tensile stress at break, 5mm/min	47	MPa	ISO 527-1/-2
Tensile strain at break, 5mm/min	0.6	%	ISO 527-1/-2
Flexural modulus	12500	MPa	ISO 178
Flexural strength	75	MPa	ISO 178
Charpy impact strength, 23 °C	4.5	kJ/m²	ISO 179/1eU
Poisson's ratio	0.34[C]		

[C]: Calculated

Thermal properties

Thermal conductivity, flow	31	W/(m K)	ISO 22007-2
Thermal conductivity, crossflow	24	W/(m K)	ISO 22007-2
Thermal conductivity, through plane	4.5	W/(m K)	ISO 22007-2
Effective thermal diffusivity, flow	2E-11[1]	m²/s	ISO 22007-4
Specific heat capacity of melt	1200[1]	J/(kg K)	ISO 22007-4

[1]: RI data

Physical/Other properties

Density	1620	kg/m³	ISO 1183

Injection

Back pressure	3	MPa

Characteristics

Processing	Injection Moulding

Additional information

Processing Notes

Pre-Drying

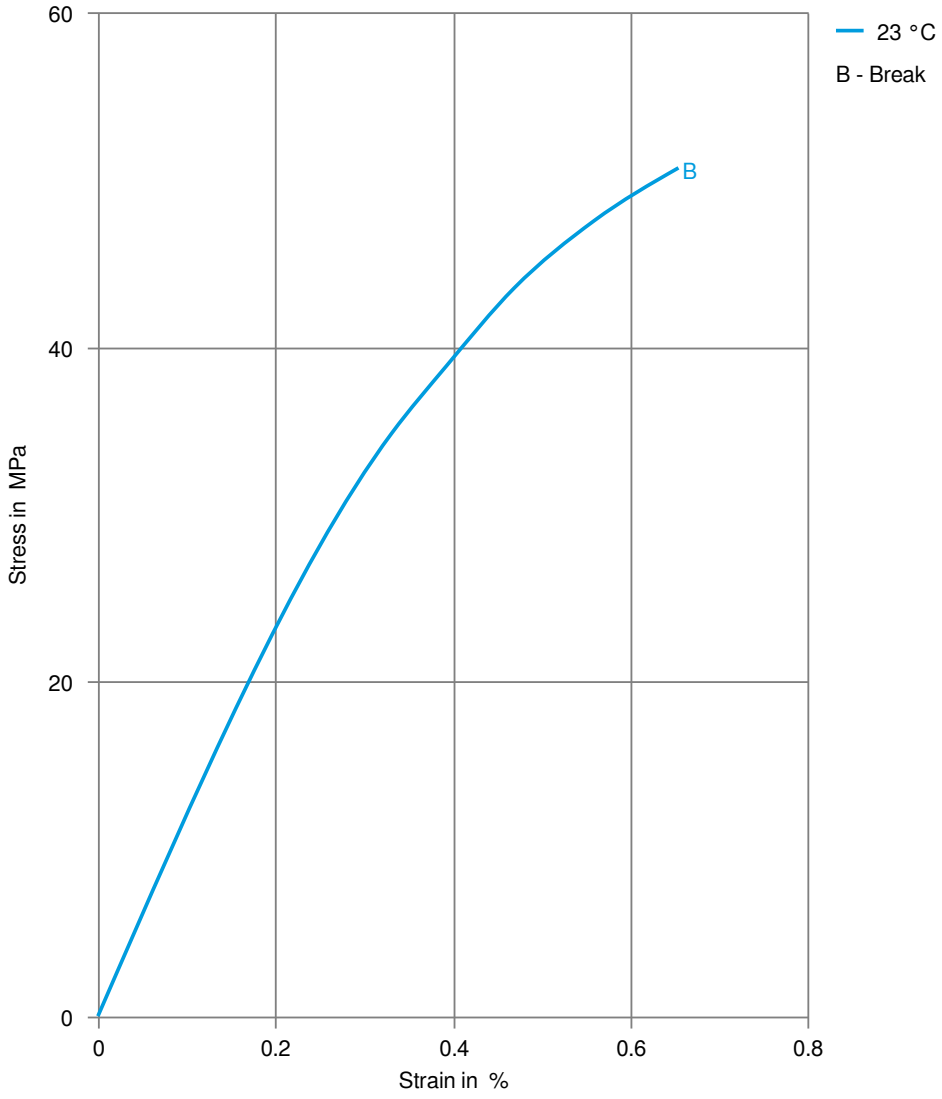
- A low compression screw (less than 2.5:1) is recommended.
- Due to drool a reverse taper nozzle is suggested
- During startup raise nozzle temperature until process stabilizes to help prevent initial nozzle freeze-off
- Material should be dried to a moisture content level of .05% or less prior to injection molding.
- Material is moisture sensitive. During processing use of a preheated desiccant dryer 175F is advised to keep material dry.
- Immediately close and seal any bag or container of unused material.

Celanese
The chemistry inside innovation™

COOLPOLY® E3617

COOLPOLY®

Stress-strain



Celanese
The chemistry inside innovation™

COOLPOLY® E3617

COOLPOLY®

Secant modulus-strain