

Parameter	Test method	Unit	Value
Thermal properties			
Glass transition temperature	DSC	°C	50
Melting point Tm1	DSC	°C	171
Melting point Tm2	DSC	°C	N/A
Crystallisation temperature	DSC	°C	107
Heat deflection temperature	ISO 75, B	°C	119
Vicat softening point VST	ISO 306, A/50	°C	150
Barrier properties			
Permeation of N ₂			N/A
Permeation of O ₂ (OTR)	23°C, 50%RH, 0,21bar	internal	cm ³ /(m ² .day)
Permeation of CO ₂			N/A
Permeation of H ₂ O vapour	23°C, 50%RH	internal	mg/(m ² .day)
Biodegradation			
Degree of disintegration after 90 days incubation	58°C (thermophilic)	ISO 20200	%
	25°C (mesophilic)		%
Time to 100% disintegration	58°C (thermophilic)		days
	25°C (mesophilic)		days
Total microbial decomposition	N/A		

* Under certification process

Storage and handling

NONOILEN® is delivered in 20kg barrier bags. The original package should be stored at humidity up to 60% and temperature in range 10 – 30°C. Pellets are pre-dried. Before processing, drying for 1 hour at 70°C is recommended. The moisture content should be below 1000 ppm (0,1%).

Processing conditions

For 3D filament production melt temperature should not exceed 190°C, optimally it should range from 160 to 180°C on the die. Filaments with diameter 1,75 mm or 2,85 mm are usually produced. For 3D printing the base plate temperature is recommended 20-50°C. Filaments on spool are also pre-dried.

Special additives

Colour masterbatches and other additive masterbatches can be used for processing as well as other properties modification. The Clariant masterbatches for NONOILEN® are recommended.