

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	16	cm ³ /10min	ISO 1133
Temperature	265	°C	-
Load	2.16	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	10200	MPa	ISO 527
^[C] Stress at break	150	MPa	ISO 527
^[C] Strain at break	2.5	%	ISO 527
^[C] Charpy impact strength, +23°C	55	kJ/m ²	ISO 179/1eU
^[C] Charpy impact strength, -30°C	51	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
^[C] Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
^[C] Temp. of deflection under load, 1.80 MPa	204	°C	ISO 75-1/-2
^[C] Temp. of deflection under load, 0.45 MPa	222	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
^[C] Density	1550	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding

Additives

Release agent

Delivery form

Pellets, Black

Regional Availability

Asia Pacific

Other text information

Injection molding

To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0,02%. The drying should be done in a dry-air dryer (dew point < -30°C) with a temperature of 120 to 140 °C and a drying time of 2 to 4 hours. In case of longer residence times in the dry-air dryer, the temperature should be reduced to 100°C.

The time between drying and processing should be kept as short as possible. The processing machine feed hopper should be closed during the processing operation.

Melt Temperature 255-275 °C

Mold Temperature *) 80-100 °C

Maximum Barrel Residence Time **) 5-10 min

Injection Speed medium-fast

Holding Pressure 1000bar

Nozzle Design open design preferred

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.

Fast fill rates are recommended to ensure uniform melt delivery to the cavity and prevent premature freezing. Surface appearance is directly affected by injection rate.

Celanese recommends only externally heated hot runner systems.

*) This product can be processed over mold temperatures of 60-100°C (140-212°F); however, for optimizing surface appearance, dimensional stability and part performance, mold surface temperatures of at least 80°C (176°F) are preferred. For moulded parts with especially high requirements to the surface quality or dimensional stability, a mold temperature of up to 100 °C can be advantageous.

***) If the cylinder temperatures are higher than the recommended maximum temperatures, the max. residence time in the barrel has to be reduced.