Technical Data Sheet

*Circulen*Recover 320 PA6 MT30 8001

Polyamide 6

Product Description

30% mineral reinforced, **Polyamide 6** formulated on mechanical recycled sourcing.
Standard color is black, color matching for dark colors possible.
Automotive structural applications are possible.
Sustainability:
According with the requirements of Standard ISO 14021:2016, *Circulen*Recover 320 PA6 MT30 8001 contains **20% of recycled material that is fully based on pre-consumer waste.**
Recycled content according to DIN SPEC 91446:2021-12: R25
Data Quality Level according to DIN SPEC 91446:2021-12: DQL4
Data Quality Level according to VDA 284: DQL Automotive

Processing Method	Injection Molding
Attribute	Low Warpage; Medium Viscosity
Filler/Reinforcement	Talc, 30%
Resin ID	PA6-T30

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.36	g/cm³	ISO 1183
Viscosity Number	145	cm³/g	ISO 307
Mechanical			
Tensile Strain at Break			
(Type 1A, 5 mm/min)	3.0	%	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	15	%	ISO 527-2
Tensile Stress at Break			
(Type 1A, 5 mm/min)	73.0	MPa	ISO 527-2
(Type 1A, 5 mm/min) - Conditioned	45.0	MPa	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	6500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	3300	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	3.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	8.0	kJ/m²	ISO 179

Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	40	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise)	30	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	60	kJ/m²	ISO 179
Thermal			
Vicat Softening Temperature			
(B (50N), 50 °C/h)	200	°C	ISO 306
(A (10N), 50 °C/h)	215	°C	ISO 306
Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)	200	°C	ISO 75-2/B
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	100	°C	ISO 75-2/A
Flammable			
Burning Rate			
(2.00 mm)	48	mm/min	FMVSS 302
(2.00 mm)	48	mm/min	ISO 3795

Injection Parameters	Nominal Value	Units
Drying Time	3.0 to 4.0	hr
Drying Temperature	80	°C
Suggested Max Moisture	0.040 to 0.10	%
Processing (Melt) Temp	250 to 280	°C
Mold Temperature	60 to 100	°C