Technical Data Sheet

*Circulen*Recover EP PA6 MV14 U RED964100

Polyamide 6

Product Description

Unfilled Polyamide 6 formulated on mechanical recycled sourcing. The product is available in a red color, pellet form.Sustainability:According with the requirements of Standard ISO 14021:2016, Circulen Recover EP PA6 MV14 U RED contains 75% of recycled material that is fully based on pre-consumer waste.Recycled content according to DIN SPEC 91446:2021-12: R75Data Quality Level according to DIN SPEC 91446:2021-12: DQL4Data Quality Level according to VDA 284: DQL Automotive

Processing Method	Injection Molding
Attribute	Medium Viscosity; UV Stabilized
Resin ID	PA6

Typical Properties	Nominal Value	Units	Test Method
Physical			
Density, (Method A)	1.13	g/cm³	ISO 1183
Apparent (Bulk) Density	0.60 to 0.80	g/cm³	ISO 60
Mechanical			
Tensile Stress at Yield			
(Type 1A, 50 mm/min)	90.0	MPa	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	50.0	MPa	ISO 527-2
Tensile Strain at Yield			
(Type 1A, 50 mm/min)	4.0	%	ISO 527-2
(Type 1A, 50 mm/min) - Conditioned	19	%	ISO 527-2
Tensile Modulus			
(1 mm/min, Type 1A)	3500	MPa	ISO 527-1
(1 mm/min, Type 1A) - Conditioned	1400	MPa	ISO 527-1
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m²	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m²	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	32	kJ/m²	ISO 179
Charpy Impact Strength - Unnotched			
(23 °C, Type 1, Edgewise)	No Break		ISO 179
(-30 °C, Type 1, Edgewise)	No Break		ISO 179
(23 °C, Type 1, Edgewise) - Conditioned	No Break		ISO 179
Thermal			
Vicat Softening Temperature, (B (50N))	197	°C	ISO 306
Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)	82.0	°C	ISO 75-2/A

Flammable			
Burning Rate, (FMVSS 302)	<100	mm/min	FMVSS 302
Additional Information			
Water Absorption Sat/23C, - Conditioned	2.2	%	ISO 62
UL Information			
Flame Rating	HB		UL 94

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