

## Technical Data Sheet

### CirculenRecover 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: R75 Data Quality Level according to DIN SPEC 91446:2021-12: DQL4 Data Quality Level according to VDA 284: DQL Automotive

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Medium Viscosity; UV Stabilized
<b>Resin ID</b>	PA6

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Density, (Method A)	1.13	g/cm <sup>3</sup>	ISO 1183
Apparent (Bulk) Density	0.60 to 0.80	g/cm <sup>3</sup>	ISO 60
<b>Mechanical</b>			
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
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.0	kJ/m <sup>2</sup>	ISO 179
(-30 °C, Type 1, Edgewise, Notch A)	4.0	kJ/m <sup>2</sup>	ISO 179
(23 °C, Type 1, Edgewise, Notch A) - Conditioned	32	kJ/m <sup>2</sup>	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
<b>Thermal</b>			
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

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**Flammable**

Burning Rate, (FMVSS 302)	<100	mm/min	FMVSS 302
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**Additional Information**

Water Absorption Sat/23C, - Conditioned	2.2	%	ISO 62
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**UL Information**

Flame Rating	HB	UL 94
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<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
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