

Technical Data Sheet

**Circulen EP348U Plus**



Polypropylene, Impact Copolymer

**Product Description**

Circulen EP348U Plus is a circular polymer, which contains building blocks from non-mechanical recycling processes converting renewables and organic wastes into new cracker feedstock.

The bio content of recycled cracker feedstock is measured and certified on the Certificate of Analysis.

Circulen EP348U Plus is a nucleated, antistatic formulated, very high flow impact copolymer suitable for thin-walled injection molding applications.

Circulen EP348U Plus combines an excellent processability with a very good impact strength at low temperature.

Circulen EP348U Plus is typically used by customers for margarine tubs, packaging for dairy products, ice cream containers, lids, caps, housewares, toy boxes, flower pots and laundry baskets

This grade is not intended for medical and pharmaceutical applications.

<b>Status</b>	Commercial: Active
<b>Availability</b>	Africa-Middle East; Europe
<b>Application</b>	Caps & Closures; Housewares; Opaque Containers
<b>Market</b>	Consumer Products; Rigid Packaging
<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Processability; High Impact Resistance; Medium Stiffness; Nucleated

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (230 °C/2.16 kg)	70	g/10 min	ISO 1133-1
Density, (23 °C)	0.90	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Tensile Modulus	1200	MPa	ISO 527-1, -2
Tensile Stress at Yield	24	MPa	ISO 527-1, -2
Tensile Strain at Break	30	%	ISO 527-1, -2
Tensile Strain at Yield	4	%	ISO 527-1, -2
<b>Impact</b>			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	5.5	kJ/m <sup>2</sup>	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	4	kJ/m <sup>2</sup>	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	3.2	kJ/m <sup>2</sup>	ISO 179
Ductile/Brittle Transition Temperature	-45	°C	ISO 6603-2
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	50	MPa	ISO 2039-1
<b>Thermal</b>			

Vicat Softening Temperature		
(A/50 N)	150 °C	ISO 306
(B50)	65 °C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	92 °C	ISO 75B-1, -2
<b>Optical</b>		
Gloss, (60°)	65 %	ASTM D2457

**Notes**

These are typical property values not to be construed as specification limits.