Technical Data Sheet

Circulen EP310M HP

Polypropylene, Impact Copolymer

Product Description

Circulen EP310M HP is a circular polymer, which contains building blocks from non-mechanical recycling processes converting renewables and organic or plastic wastes into new cracker feedstock.
The content of recycled cracker feedstock is certified by mass balance.

Circulen EP310M HP is a heterophasic copolymer, used in film applications for lamination on other substrates where high impact at room and low temperatures is needed. Moreover *Circulen* EP310M HP features a good stiffness. This new grade is produced using a non-phthalate catalyst system favored by customers in applications intended for food contact. The film viscosity achieved with *Circulen* EP310M HP offers good processability on cast lines. This polypropylene heterophasic copolymer exhibits high impact, good puncture, good tear resistance, high seal strength and seal integrity.

Status	Commercial: Active
Availability	Africa-Middle East; Europe
Application	Bags & Pouches; Food Packaging Film; Impact Modification; Lamination Film; Surface Protection Film
Market	Flexible Packaging
Processing Method	Cast Film
Attribute	Good Processability; Impact Copolymer; Medium Flow

Typical Properties	Nominal Value	Units	Test Method
Physical			
Melt Flow Rate, (230 °C/2.16 kg)	7.5	g/10 min	ISO 1133-1
Density	0.90	g/cm³	ISO 1183-1
Mechanical			
Tensile Modulus	1050	MPa	ISO 527-1, -2
Tensile Stress at Yield	21	MPa	ISO 527-1, -2
Tensile Strain at Break		%	ISO 527-1, -2
Tensile Strain at Yield	6	%	ISO 527-1, -2
Impact			
Charpy Impact Strength - Notched			
(23 °C, Type 1, Edgewise, Notch A)	45	kJ/m²	ISO 179
(0 °C, Type 1, Edgewise, Notch A)	9	kJ/m²	ISO 179
(-20 °C, Type 1, Edgewise, Notch A)	7	kJ/m²	ISO 179
Ductile/Brittle Transition Temperature	-55	°C	ISO 6603-2
Hardness			
Ball Indentation Hardness	46	MPa	ISO 2039-1
Thermal			
Vicat Softening Temperature, (A50)	144	°C	ISO 306

Deflection Temperature Under Load, (0.45 MPa, Unannealed)	80	°C	ISO 75B-1, -2

Notes

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