

## Technical Data Sheet

### *Circulen* HP501H



Polypropylene, Homopolymer

#### Product Description

*Circulen* HP501H 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* HP501H is a polypropylene homopolymer for use in injection and compression molding applications.

*Circulen* HP501H exhibits a good stiffness/impact balance at ambient temperature. It provides good hinge performances on caps, as well as good environmental stress cracking resistance.

*Circulen* HP501H is used in caps, closures, sprayers, housewares and furniture.

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
<b>Market</b>	Consumer Products; Rigid Packaging
<b>Processing Method</b>	Extrusion Blow Molding; Injection Molding; Thermoforming
<b>Attribute</b>	General Purpose; Homopolymer; Medium Impact Resistance; Medium Stiffness

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (230 °C/2.16 kg)	2.1	g/10 min	ISO 1133-1
Density, (23 °C)	0.90	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Tensile Modulus	1450	MPa	ISO 527-1, -2
Tensile Stress at Yield	33	MPa	ISO 527-1, -2
Tensile Strain at Break	>50	%	ISO 527-1, -2
Tensile Strain at Yield	9	%	ISO 527-1, -2
<b>Impact</b>			
Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A)	8	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Ball Indentation Hardness, (H 358/30)	72	MPa	ISO 2039-1
<b>Thermal</b>			
Vicat Softening Temperature, (A50)	154	°C	ISO 306
Heat Deflection Temperature B, (0.45 MPa, Unannealed)	90	°C	ISO 75B-1, -2

#### Notes

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