



# COHERE™ PLASTOMER 8102

## METALLOCENE POLYOLEFIN PLASTOMER

### DESCRIPTION

COHERE™ Metallocene Polyolefin Plastomer (POP) 8102 is an ethylene-octene copolymers produced via solution polymerization using metallocene catalyst. It performs well in high performance LLDPE blown film applications with an excellent combination of toughness, hot tack, sealing and optical properties.

### TYPICAL APPLICATIONS

Low temperature sealing layer for high value packaging (low SIT, seal through contamination, toughness improvement).

### TYPICAL PROPERTY VALUES

Revision 20211208

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	1.0	g/10 min	ASTM D1238
<b>Density</b>	902	kg/m <sup>3</sup>	ASTM D1505
<b>Mooney viscosity</b>			
ML 1+4, 121 °C	20	MU	ASTM D1646
<b>MECHANICAL PROPERTIES <sup>(1)</sup></b>			
<b>Tensile Strength at Break <sup>(2)</sup></b>	250	kgf/cm <sup>2</sup>	ASTM D638
<b>Tensile Elongation at Break <sup>(2)</sup></b>	800	%	ASTM D638
<b>Flexural Modulus (1% Secant)</b>	840	kgf/cm <sup>2</sup>	ASTM D790
<b>Tear Strength (Type C)</b>	87	kgf/cm <sup>2</sup>	ASTM D624
<b>Hardness</b>			
Shore A (1 sec)	92	-	ASTM D2240
Shore D (1 sec)	40	-	ASTM D2240
<b>OPTICAL PROPERTIES</b>			
<b>Haze</b>	4	%	ASTM D1003
<b>FILM PROPERTIES</b>			
<b>Tensile test film <sup>(3)</sup></b>			
stress at break, MD	47	MPa	ASTM D882
stress at break, TD	42	MPa	ASTM D882
elongation at break, MD	600	%	ASTM D882
elongation at break, TD	620	%	ASTM D882
1% secant modulus, MD	68	MPa	ASTM D882
1% secant modulus, TD	76	MPa	ASTM D882
<b>Dart Impact F50 <sup>(3)</sup></b>	>1000	g	ASTM D1709
<b>Elmendorf Tear Strength <sup>(3)</sup></b>			
MD	10	g/μm	ASTM D1922
TD	17	g/μm	ASTM D1922
<b>Sealing Initiation Temperature <sup>(3)</sup></b>	80	°C	SABIC method
<b>THERMAL PROPERTIES</b>			
<b>Melting Point</b>	106	°C	SABIC method



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Glass Transition Temperature, Tg	-31	°C	SABIC method

- (1) Evaluated using compression molded sample.  
(2) Crosshead speed: 500mm/min.  
(3) Properties have been measured by producing 50 µm film with 2.5 BUR using 100% COHERE 8102

## PROCESSING CONDITIONS

Typical processing conditions for COHERE™ 8102 are:

Barrel temperature: 180 - 200°C

Blow up ratio: 2.0 - 3.0

## FOOD REGULATION

Please contact the local Sales / Technical representative for details.

## STORAGE AND HANDLING

The resin should be stored in a manner to prevent a direct exposure to sunlight and / or heat. The storage area should also be dry and preferably do not exceed 50°C. SABIC would not give warranty to bad storage conditions that may lead to quality deterioration such as color change, bad smell and inadequate product performance. It is advisable to process PE resin within 6 months after delivery.

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