



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

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