

# SABIC® COHERE™ 8402

## METALLOCENE POLYOLEFIN PLASTOMER

### DESCRIPTION

SABIC® COHERE™ 8402 grade is an ethylene-octene copolymer produced via solution polymerization using metallocene catalyst. It performs well high performance LLDPE cast film and deliver outstanding toughness optics. SABIC® COHERE™ 8402 provides excellent performance as cling layer in stretch wrap film.

### TYPICAL APPLICATIONS

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

### TYPICAL PROPERTY VALUES

Revision 20180112

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Melt Flow Rate</b>			
at 190°C and 2.16 kg	3.5	g/10 min	ASTM D1238
<b>Density</b>	902	kg/m <sup>3</sup>	ASTM D1505
<b>Mooney viscosity (ML 1+4, 121 °C)</b>	10	MU	ASTM D1646
<b>MECHANICAL PROPERTIES <sup>(1)</sup></b>			
<b>Tensile Strength at Break <sup>(2)</sup></b>	200	kgf/cm <sup>2</sup>	ASTM D638
<b>Tensile Elongation at Break <sup>(2)</sup></b>	850	%	ASTM D638
<b>Flexural Modulus (1% Secant)</b>	760	kgf/cm <sup>2</sup>	ASTM D790
<b>Tear Strength (Type C)</b>	85	kgf/cm <sup>2</sup>	ASTM D624
<b>Hardness</b>			
Shore A (1 sec)	89	-	ASTM D2240
Shore D (1 sec)	40	-	ASTM D2240
<b>OPTICAL PROPERTIES</b>			
<b>Haze</b>	0.5	%	ASTM D1003
<b>FILM PROPERTIES</b>			
<b>Tensile test film <sup>(3)</sup></b>			
stress at break, MD	50	MPa	ASTM D882
stress at break, TD	44	MPa	ASTM D882
elongation at break, MD	520	%	ASTM D882
elongation at break, TD	600	%	ASTM D882
1% secant modulus, MD	64	MPa	ASTM D882
1% secant modulus, MD	78	MPa	ASTM D882

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Dart Impact F50 <sup>(3)</sup>	>1000	g	ASTM D1709
Elmendorf Tear Strength <sup>(3)</sup>			
MD	12	g/μm	ASTM D1922
TD	17	g/μm	ASTM D1922
<b>THERMAL PROPERTIES</b>			
Melting Point	~100	°C	SABIC method
Glass Transition Temperature, Tg	-32	°C	SABIC method

(1) Evaluated using compression molded sample.

(2) Crosshead speed: 500mm/min.

(3) Properties have been measured by producing 40 μm film cast line using 100% COHERE™ 8402.

## PROCESSING CONDITIONS

Typical processing conditions for COHERE™ 8402 are:

Barrel temperature: 250 - 300°C

Chill roll temperature: 15 - 25 °C

## FOOD REGULATION

Please contact the local Sales / Technical representative for details.

## DISCLAIMER

The grades are not intended for and must not be used in any pharmaceutical / medical applications.

## 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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