

# FORTIFY™ ELASTOMER C1085

## POLYOLEFIN ELASTOMER

### DESCRIPTION

FORTIFY™ Polyolefin Elastomer (POE) C1085 is an ethylene octene copolymer produced by solution polymerization using metallocene catalyst. This product is available as free flowing pellets.

FORTIFY™ Polyolefin Elastomer (POE) C1085 is designed as a low density and high performance copolymer modifier to provide superior impact properties and flow characteristics.

### TYPICAL APPLICATIONS

Impact modifier in thermoplastic olefin compounds, injection molded industrial and consumer durable goods, wire and cable extrusion and footwear.

### TYPICAL PROPERTY VALUES

Revision 20220615

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
<b>Density</b>	885	kg/m <sup>3</sup>	ASTM D792
<b>Melt Flow Rate (MFR)</b>			
at 190°C and 2.16 kg	1.0	g/10 min	ASTM D1238
at 230°C and 2.16 kg	2.0	g/10 min	ASTM D1238
<b>Mooney viscosity</b>			
ML 1+4, 121 °C	21	MU	ASTM D1646
<b>MECHANICAL PROPERTIES</b>			
<b>Tensile Properties</b>			
strength at break	16.7	MPa	ASTM D638
elongation	700	%	ASTM D638
100% modulus	4.6	MPa	ASTM D638
<b>Durometer Hardness</b>			
shore A (1 second)	81	-	ASTM D2240
shore D (1 second)	29	-	ASTM D2240
<b>Flexural Modulus (1% Secant)</b>	29.4	MPa	ASTM D790 A
<b>Tear Strength (Type C)</b>	58.8	kN/m	ASTM D624
<b>THERMAL PROPERTIES</b>			
<b>Peak Melting Temperature</b>	74	°C	SABIC method
<b>Glass Transition Temperature, T<sub>g</sub></b>	-47	°C	SABIC method

### STORAGE AND HANDLING

POE Polyolefin Elastomer resins (in pelletized form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 30°C. Further avoid temperatures above 50°C and below 10°C. Please mind the temperature conditions when using the low density grades <0.875 g/cm<sup>3</sup>, especially when the shipment or storage temperature would approach the softening and melting temperature of the POE resin. Outer package wrap should not be removed from the pallets until the products are ready to be used. Stacking of pallets is not recommended due to dimensional instability and material blocking risk. Grades with D suffix are being treated with anti-caking dust agent to reduce blocking behaviour. It is advisable to process Polyolefin Elastomers resins within 6 months after delivery, this because also excessive aging can lead to a deterioration in quality.



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