



# FORTIFY™ ELASTOMER C1055D

## POLYOLEFIN ELASTOMER

### DESCRIPTION

SABIC® FORTIFY™ C1055D is an ethylene octene copolymer. This product is available as free flowing pellets. SABIC® FORTIFY™ C1055D 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, footwear midsoles and wire and cable extrusion.

### TYPICAL PROPERTY VALUES

Revision 20211208

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>POLYMER PROPERTIES</b>			
Density	857	kg/m <sup>3</sup>	ASTM D792
Melt Flow Rate (MFR)			
at 190°C and 2.16 kg	1.0	g/10 min	ASTM D1238
at 230°C and 2.16 kg	2.2	g/10 min	ASTM D1238
Mooney viscosity			
ML 1+4, 121 °C	24	MU	ASTM D1646
<b>MECHANICAL PROPERTIES <sup>(1)</sup></b>			
<b>Tensile Properties</b>			
strength at break	3.1	MPa	ASTM D638
elongation	>1000	%	ASTM D638
100% modulus	1.4	MPa	ASTM D638
<b>Durometer Hardness</b>			
shore A (1 second)	55	-	ASTM D2240
shore D (1 second)	12	-	ASTM D2240
Flexural Modulus (1% Secant)	4.4	MPa	ASTM D790 A
Tear Strength (Type C)	27.5	kN/m	ASTM D624
<b>THERMAL PROPERTIES</b>			
Peak Melting Temperature	37	°C	SABIC method
Glass Transition Temperature, Tg	-59	°C	SABIC method

(1) All physical properties were measured from specimens cut from compression molded. These typical values depend on manufacturing conditions. Therefore, customers should confirm the product performance by using their own tests.

### 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.



#### DISCLAIMER

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

