

# K46-06-185 Polyethylene Copolymer

K46-06-185 is a natural high molecular weight, high-density copolymer polyethylene developed for automotive fuel tanks. It combines excellent processability and outstanding physical performance, particularly environmental stress crack resistance (ESCR) and impact properties. Its high melt strength aids the continuous extrusion production of multi-layer tanks.

## Typical Properties<sup>1</sup>

	Values		ASTM Method
	English Units	SI Units	
Density	—	0.946 g/cc	D 4883
Melt Index <sup>2</sup>	—	4.2 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3400 psi	23.4 MPa	D 638
Elongation			
@ Break (2 in/min)	800%	800%	D 638
Flexural Modulus <sup>3</sup>	119,000 psi	820 MPa	D 790
Notched Izod Impact Strength <sup>4</sup>	7 ft-lbf/in	0.375 kJ/m	D 256
Hardness (Shore D)	64	64	D 2240
Vicat Softening Point	264 °F	129 °C	D 1525
Brittleness Temperature	<-103 °F	<-75 °C	D 746
Deflection Temperature @ 66 psi	158 °F	69 °C	D 648

<sup>1</sup> Typical properties will vary within specification limits.

<sup>2</sup> 190° C/21,600 g

<sup>3</sup> Secant - 2% strain

<sup>4</sup> Partial break

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Olefins & Polymers USA



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## Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, please refer to the Regulatory Position Statement (RPS) online at [www.ineos-op.com](http://www.ineos-op.com), or call + 1-800-527-5419.

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The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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