

# K46-06-185

## Product Technical Information

**K46-06-185** is a natural grade of high density, high molecular weight polyethylene. It is specially designed for use in the manufacture of automotive fuel tanks.

## Benefits & Features

- Easily mouldable into complex shapes , giving very uniform wall thickness
- Excellent cold impact strength
- Very good environmental stress crack resistance
- Low permeability to petrol/alcohol blends

## Applications

- All types of automotive fuel tanks

Properties	Conditions	Test Methods	Values	Units
<b>Rheological</b>				
Melt Flow Rate	190°C/21.6kg	ISO 1133-1	4.2	g/10min
<b>Physical</b>				
Density ISO 17855-1	23°C	ISO 1183-1	946	kg/m <sup>3</sup>
<b>Mechanical</b>				
Tensile Strength at Yield	23°C	ISO 527-2	24	MPa
Elongation at break	23°C	ISO 527-2	>500	%
Flexural Modulus	23°C, 2 mm/min	ISO 178	1000	MPa
Izod Impact Strength	23°C	ISO 180/A	62	kJ/m <sup>2</sup>
Izod Impact Strength	-40°C	ISO 180/A	32	kJ/m <sup>2</sup>
BTT Stress Crack resistance	100% Igepal , 50°C	ASTM D 1693B	>1000	hours
Shore Hardness	Shore D	ISO 868	61	-
<b>Thermal</b>				
Thermal conductivity	23°C	ISO 8302	0.44	W/m.K
Coefficient of linear expansion		ASTM D 696	1.3 10 <sup>-4</sup>	K <sup>-1</sup>
Brittleness temperature		ASTMD 746	< -118	°C
Vicat Softening Temperature	10N	ISO306/A50	130	°C
<b>Data should not be used for specification work</b>				



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## Storage

The product should be stored in a dry and dust free environment at temperature below 50°C. Exposure to direct sunlight should be avoided as this may lead to product deterioration.

It is advised to process the product within maximum one year after delivery.

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## Regulatory Information

The product and uses described herein may be subject to specific requirements or limitations for use in certain applications like food contact, drinking water or medical devices. Further information may be obtained from the website [www.ineos.com](http://www.ineos.com) where a specific Regulatory Certificate is available for each grade under the heading "SDS & Regulatory Certificate".

Unless specifically indicated, the product mentioned herein is not suitable for applications in the medical or pharmaceutical sectors.

## Health and Safety Information

The product described herein may require precautions in handling. The available product health and safety information for this material is contained in the Safety Data Sheet (SDS) that may be obtained from the website [www.ineos.com](http://www.ineos.com). Before using any material, a customer is advised to consult the SDS for the product under consideration for use.

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