

INEOS CFT K46-06-185

High Density (HMW) Polyethylene
INEOS Olefins & Polymers Europe

Technical Data

Product Description

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.

Applications

- All types of automotive fuel tanks

Characteristics

- 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

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Search for UL Yellow Card	• INEOS Olefins & Polymers Europe		
Availability	• Europe		
Features	• Alcohol Resistant • Fuel Resistant	• Good Moldability • High ESCR (Stress Crack Resist.)	• High Molecular Weight • Low Temperature Impact Resistance
Uses	• Automotive Applications	• Fuel Tanks	
RoHS Compliance	• Contact Manufacturer		
Appearance	• Natural Color		
Forms	• Pellets		

Physical	Nominal Value Unit	Test Method
Density ³	0.946 g/cm ³	ISO 1183/A
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	4.2 g/10 min	ISO 1133
Environmental Stress-Cracking Resistance 50°C, 100% Antarox	> 500 hr	ASTM D1693A
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus (23°C)	1200 MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	24.0 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	> 500 %	ISO 527-2
Impact	Nominal Value Unit	Test Method
Notched Izod Impact Strength -40°C 23°C	32 kJ/m ² 62 kJ/m ²	ISO 180/1A
Hardness	Nominal Value Unit	Test Method
Shore Hardness (Shore D, 23°C)	61	ISO 868
Thermal	Nominal Value Unit	Test Method
Brittleness Temperature	< -118 °C	ASTM D746
Vicat Softening Temperature	128 °C	ISO 306/A
CLTE - Flow	0.000013 cm/cm/°C	ASTM D696
Thermal Conductivity (23°C)	0.44 W/m/K	ISO 8302

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ Annealed