

INEOS HDPE K50-10-136

High Density Polyethylene Copolymer

INEOS Olefins & Polymers USA

Message:

K50-10-136 is a high molecular weight, high density polyethylene copolymer for blow molding automotive fuel tanks and under hood reservoirs. It combines excellent processability and outstanding physical performance, particularly environmental stress crack resistance (ESCR) and impact properties.

General Information			
Features	Copolymer		
	Good Impact Resistance		
	Good Processability		
	High Density		
	High ESCR (Stress Crack Resist.)		
	High Molecular Weight		
Uses	Automotive Under the Hood		
	Fuel Tanks		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	Contact Manufacturer		
Forms	Pellets		
Processing Method	Blow Molding		
Physical	Nominal Value	Unit	Test Method
Density	0.950	g/cm ³	ASTM D4883
Melt Mass-Flow Rate (MFR) (190°C/21.6 kg)	9.0	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance			
10% Igepal, F50	430	hr	ASTM D1693A
10% Igepal, F50	340	hr	ASTM D1693B
100% Igepal, F50	> 1000	hr	ASTM D1693A
100% Igepal, F50	> 1000	hr	ASTM D1693B
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	63		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ¹			ASTM D638
Yield	26.2	MPa	
Break	37.2	MPa	
Tensile Elongation ²			ASTM D638
Yield	9.9	%	
Break	850	%	
Flexural Modulus			ASTM D790A

2% Secant	917	MPa	
Tangent	1230	MPa	
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	450	J/m	ASTM D256
Notched Izod Impact (Area)	44.0	kJ/m ²	ASTM D256
Instrumented Impact, Ductility			ASTM D3763
-30°C	Ductile		
23°C	Ductile		
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	70.0	°C	
1.8 MPa, Unannealed	47.8	°C	
Brittleness Temperature	< -75.0	°C	ASTM D746
Vicat Softening Temperature	126	°C	ASTM D1525
NOTE			
1.	51 mm/min		
2.	51 mm/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT