

Total 3802 B HDPE, cable, sheet, pipe, injection molding

Category : Polymer , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), Pipe Grade

Material Notes:

FINATHENE® 3802 B is a polyethylene copolymer based on C6 hexene as co-monomer and is produced by a continuous low-pressure slurry polymerization process. FINATHENE® 3802 B is a black polyethylene developed for cable sheathing applications and is designed to meet the requirements for telecommunication cables and power cable (medium and high voltage). FINATHENE® 3802 B is a black medium density polyethylene specially developed for potable water and gas distribution applications. Information provided provided by Total Petrochemicals. Total Petrochemicals acquired former Fina and Atofina plastics product lines.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Total-3802-B-HDPE-cable-sheet-pipe-injection-molding.php

Physical Properties	Metric	English	Comments
Density	0.948 g/cc	0.0342 lb/in ³	ISO 1183
Viscosity	1.30e+6 cP	1.30e+6 cP	ATOFINA research test
	@Shear Rate 100 1/s, Temperature 190 °C	@Shear Rate 100 1/s, Temperature 374 °F	
Environmental Stress Crack Resistance	>= 1000 hour	>= 1000 hour	ASTM D1693 cond. B
Oxidative Induction Time (OIT)	>= 30 min	>= 30 min	EN 728
Carbon Black Loading	2.0 - 2.5 %	2.0 - 2.5 %	ISO 6964
Melt Flow	0.20 g/10 min	0.20 g/10 min	ISO 1133
	@Load 2.16 kg	@Load 4.76 lb	
High Load Melt Index	0.92 g/10 min	0.92 g/10 min	ISO 1133
	@Load 5.00 kg	@Load 11.0 lb	
High Load Melt Index	18 g/10 min	18 g/10 min	ISO 1133
	@Load 21.6 kg	@Load 47.6 lb	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	60	60	DIN 53505
Tensile Strength at Break	32.0 MPa	4640 psi	ISO 527
Tensile Strength, Yield	18.0 MPa	2610 psi	ISO 527
Elongation at Break	>= 700 %	>= 700 %	ISO 527
Elongation at Yield	9.0 %	9.0 %	ISO 527
Modulus of Elasticity	0.700 GPa	102 ksi	ISO 178

Mechanical Properties	Metric	English	Comments
Flexural Modulus	0.800 GPa	116 ksi	ASTM D 790

Thermal Properties	Metric	English	Comments
Heat of Fusion	152 J/g	65.4 BTU/lb	DSC
CTE, linear	120 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	66.7 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	
	@Temperature 20.0 $^{\circ}\text{C}$	@Temperature 68.0 $^{\circ}\text{F}$	
Specific Heat Capacity	2.00 J/g- $^{\circ}\text{C}$	0.478 BTU/lb- $^{\circ}\text{F}$	DSC
	2.60 J/g- $^{\circ}\text{C}$	0.621 BTU/lb- $^{\circ}\text{F}$	DSC
Thermal Conductivity	0.400 W/m-K	2.78 BTU-in/hr-ft 2 - $^{\circ}\text{F}$	DIN 52612
	0.200 W/m-K	1.39 BTU-in/hr-ft 2 - $^{\circ}\text{F}$	DIN 52612
Melting Point	125 - 129 $^{\circ}\text{C}$	257 - 264 $^{\circ}\text{F}$	crystalline; DSC
	@Temperature 150 $^{\circ}\text{C}$	@Temperature 302 $^{\circ}\text{F}$	
Vicat Softening Point	125 $^{\circ}\text{C}$	257 $^{\circ}\text{F}$	ISO 306
Brittleness Temperature	-100 $^{\circ}\text{C}$	-148 $^{\circ}\text{F}$	ASTM D 746

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+16$ ohm-cm	$\geq 1.00\text{e}+16$ ohm-cm	IEC 93
Surface Resistance	$\geq 1.00\text{e}+16$ ohm	$\geq 1.00\text{e}+16$ ohm	IEC 93
Dielectric Constant	2.35	2.35	IEC 250
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	16.0 kV/mm	406 kV/in	IEC 243
Dissipation Factor	0.00020	0.00020	IEC 250
	@Frequency 1000 Hz	@Frequency 1000 Hz	
	0.00030	0.00030	IEC 250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China