Formolene® HP3902

Medium Density Polyethylene

Formosa Plastics Corporation, U.S.A.

Message:

Formolene® HP3902 is a high performance copolymer that is designed for pressure pipe and conduit applications. It has outstanding pipe ring ESCR and it incorporates a UV stabilizer.
Formolene® HP3902 meets all requirements of ASTM D4976 - PE 225.
When blended with the approved color concentrates, Formolene® HP3902 has a cell class of 234373E per ASTM D3350-05, is listed by PPI as a PE2708 material with HDB's of 1,250 psi @ 73°F and 1,000 psi @ 140°F, meets the requirements of CAN/CSA Standard B137.4-02 for gas pipe and NSF Standard 14/61 for use with potable water.
Formolene® HP3902 also qualifies as a PE2406 material under the old ASTM D3350-02a and PPI standards.
Formolene® HP3902 also qualifies as a PE80 material per ISO 9080.

General Information	
Additive	UV Stabilizer
Features	Good UV Resistance Hexene Comonomer High ESCR (Stress Crack Resist.) Medium Density
Uses	Conduit Fluid Handling Fuel Lines Piping
Agency Ratings	ASTM D 3350 PE234373E CSA B137.4-02 EC 1907/2006 (REACH) ISO 9080 PE 80 NSF 14 NSF 61 PPI PE-2406 PPI PE-2708
Appearance	Natural Color
Forms	Pellets
Processing Method	Compression Molding

Physical	Nominal Value	Unit	Test Method
Density	0.939	g/cm³	ASTM D1505
Melt Mass-Flow Rate (MFR)			ASTM D1238
190°C/2.16 kg	0.20	g/10 min	
190°C/21.6 kg	20	g/10 min	

Environmental Stress-Cracking Resistance			
100% Igepal, Compression Molded, F50	> 5000	hr	ASTM D1693A
100% Igepal, Compression Molded, F50	> 5000	hr	ASTM D1693B
100% Igepal, Compression Molded, F50	> 5000	hr	ASTM D1693C
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength [1]			ASTM D638
Yield, Compression Molded	19.3	MPa	
Break, Compression Molded	33.1	MPa	
Tensile Elongation [2] (Break, Compression Molded)	> 500	%	ASTM D638
Flexural Modulus			
Compression Molded	621	MPa	ASTM D3350
Compression Molded	758	MPa	ASTM D790
Thermal	**Nominal Value**	**Unit**	**Test Method**
Brittleness Temperature	< -90.0	°C	ASTM D746
Additional Information	**Nominal Value**	**Unit**	**Test Method**
PENT - slow crack growth	< 1000	hr	ASTM F1473
NOTE			
1.	Type IV, 51 mm/min		
2.	Type IV, 51 mm/min		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

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