

## Formosa Plastics Formolene® HP4401 Pipe HDPE

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

## **Material Notes:**

High Density Hexene CopolymerApplications: Potable water, industrial mining, oil and gas gatheringsFormolene HP4401 is a high performance copolymer that is designed for the most demanding requirements of pressure pipe applications. It has good long-term hoop strength performance, very high melt strength, outstanding toughness even at low temperatures. Produced using licensor formulation for HHM TR-480Z. Licensor does not warrant or imply that this product meets their specifications for HHM TR-480Z. Formolene HP4401 meets all the requirements of ASTM D4976-PE225. It also meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520 for food packaging. Nominal properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D1928. Physical properties are typical of product but do not reflect normal testing variance and therefore should not be used for specification purposes. Information provided by Formosa Plastics Corporation, USA.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_Formosa-Plastics-Formolene-HP4401-Pipe-HDPE.php

Physical Properties	Metric	English	Comments
Density	0.944 g/cc	0.0341 lb/in³	Natural; ASTM D1505
	0.955 g/cc	0.0345 lb/in³	Black; ASTM D1505
Environmental Stress Crack Resistance	>= 1000 hour	>= 1000 hour	Condition A,B,C (100% Igepal), F <sub>50</sub> ; ASTM D1693
Melt Flow	0.11 g/10 min	0.11 g/10 min	Condition E; ASTM D1238
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	
High Load Melt Index	12 g/10 min	12 g/10 min	
	@Load 21.6 kg, Temperature 190 °C	@Load 47.6 lb, Temperature 374 °F	Condition F; ASTM D1238

Mechanical Properties	Metric	English	Comments
PENT	150 hour	150 hour	ASTM F1473
Tensile Strength at Break	34.5 MPa	5000 psi	2" (50mm) per min.; ASTM D638 Type IV
Tensile Strength, Yield	22.1 MPa	3200 psi	2" (50mm) per min.; ASTM D638 Type IV
Elongation at Break	>= 500 %	>= 500 %	2" (50mm) per min.; ASTM D638
Flexural Modulus	0.758 GPa	110 ksi	ASTM D3350
	0.965 GPa	140 ksi	ASTM D790



Thermal Properties	Metric	English	Comments
Brittleness Temperature	<= -90.0 °C	<= -130 °F	ASTM D746

## **Contact Songhan Plastic Technology Co.,Ltd.**

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