


Formosa Plastics®
Formolene® HDPE

Formolene® HP4000

High Density Polyethylene for Pipe Non-Pressure Pipe Extrusion Applications

Formolene® HP4000 is a high performance copolymer that is designed for the most demanding requirements of non-pressure pipe applications. It has good long-term hoop strength performance, very high melt strength, and outstanding toughness even at low temperatures.

Formolene® HP4000 meets all requirements of ASTM D4976 – PE 235

Formolene® HP4000 meets the requirements of ASTM F 2160 and UL651A for use in solid wall HDPE conduit pipe.

Suggested Applications:

Telecommunications Conduit

Non-Pressure Pipe Applications

Nominal Physical Properties:

PROPERTY* (Natural Resin)	ASTM TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Density	D1505	g/cc	0.944	g/cc	0.944
Melt Index, Condition E, 190°C/2.16 kg (MI)	D1238	g/10 min.	0.14	g/10 min.	0.14
Environmental Stress Crack Resistance (ESCR) Condition A, B, C (100% Igepal), F ₅₀	D1693	h	>1000	h	>1000
Tensile Yield Strength, @ Yield	D638	psi.	3200	MPa	22
@ Break	Type IV	psi.	5000	MPa	34
2" (50 mm) per min.					
Ultimate Elongation, 2" (50 mm) per min.	D638 Type IV	%	>500	%	>500
Flexural Modulus	D3350	psi.	110,000	MPa	760
	D790	psi.	140,000	MPa	960
Brittleness Temperature	D746	°F	<-130	°C	<-90

* Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D1928

The nominal properties reported herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes.

Published 06/01/06, Revised 09/18

Any inquiries regarding this data sheet should be addressed to: 9 Peach Tree Hill Road • Livingston, NJ 07039 • Phone: (888) FPCUSA3 • Fax: (973) 422-7772

The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions concerning uses or applications are only the opinion of FORMOSA PLASTICS CORPORATION, U.S.A. and users should perform their own tests to determine the suitability of these products for their own particular purposes. However, because of numerous factors affecting the results, FORMOSA PLASTICS CORPORATION, U.S.A. MAKES NO WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, other than that the material conforms to the applicable current Standard Specifications Statements herein, therefore, should not be construed as representations or warranties. The responsibility of FORMOSA PLASTICS CORPORATION, U.S.A. for claims arising out of breach of warranty, negligence, strict liability or otherwise is limited to the purchase price of the material. Statements concerning the use of the products of formulations described herein are not to be construed as recommending the infringement of any patent and no liability for infringement arising out of any such use is assumed.

© Formosa Plastics Corporation, U.S.A.

Formolene® is a registered trademark of FPC USA