



Formosa Plastics®

Formolene® HDPE

Formolene® HP4525

High Density Polyethylene Non-pressure Pipe Extrusion Resin

Formolene® HP4525 is a high performance copolymer designed for non-pressure pipe applications. It has good long-term hoop strength performance and outstanding toughness even at low temperatures. Overall, it provides an excellent balance of stiffness, and process ability in conduit pipe applications.

Formolene® HP4525 meets the requirements of ASTM F2160, UL651A and NEMA TC-7. HP4525 also meets a minimum ASTM D3350 Cell Classification of 335440A.

Suggested Applications:

Conduit Pipe
Telecommunications Pipe
Drip Irrigation Pipe

Nominal Physical Properties:

PROPERTY*	ASTM TEST METHOD	English		SI	
		UNIT	VALUE	UNIT	VALUE
Density	D1505	g/cc	0.948	g/cc	0.948
Melt Index,					
Condition E, 190°C/2.16 kg (MI)	D1238	g/10 min.	0.30	g/10 min.	0.30
Condition F, 190°C/21.6 kg (HLMI)		g/10 min.	20.0	g/10 min.	20.0
Tensile at Break,					
2 in./min, Type IV bar	D638	psi.	3500	MPa	25
Elongation at Break,					
2 in./min, Type IV bar	D638	%	>600	%	>600
Flexural Modulus					
Tangent – 16:1 span:depth,					
0.5 in / min.	D790	psi.	120,000	MPa	827
Environmental Stress Crack Resistance					
Condition B, (10% Igepal), F10	D1693	h	>96	h	>96
Condition C, (100% Igepal), F20		h	>192	h	>192
Brittleness Temperature,	D746	°F	-175	°C	-115
Hardness (Shore D)	D2240	-	68	-	68

* Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D4703, Annex A1.

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.

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