


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 processability in conduit pipe applications.

Formolene HP4525 meets the requirements of ASTM F2160, UL651A and NEMA TC-7. DP4525A also meets a minimum ASTM D3350 Cell Classification of 335430A.

Suggested Applications

Conduit Pipe
Telecommunications Pipe
Drip Irrigation Pipe

Nominal Physical Properties

PROPERTY	TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Density	D1505	g/cc	0.948	g/cc	0.948
Melt Index, Condition E,	D1238	g/10 min.	0.30	g/10 min.	0.30
190°C/2.16 kg		g/10 min.	20.0	g/10 min.	20.0
190°C/21.6 kg (HLMI)					
Tensile at Break,	D638	psi	3,500	MPa	25
2 in./min, Type IV bar					
Elongation at Break,	D638	%	>600	%	>600
2 in./min, Type IV bar					
Flexural Modulus	D790	psi	120,000	MPa	827
Tangent – 16:1 span:depth,					
0.5 in./min.					
Environmental Stress Crack	D1693	Hrs.	>96	Hrs.	>96
Resistance		Hrs.	>192	Hrs.	>192
Condition B (10% Igepal), F10.					
Condition C,(100% Igepal), F20					
Brittleness Temperature	D746	°F	-175	°C	-115
Hardness (Shore D)	D2240	-	68	-	68

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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