



Formosa Plastics®

Formolene® HDPE

Formolene® HL3812

Medium Density Polyethylene Resin Designed For Blown Film Extrusion Applications

Formolene® HL3812 is a high molecular weight hexene copolymer resin that is tailored specifically for geomembrane applications. The resin provides an excellent balance of ESCR properties, broad fusion range, excellent melt strength and good overall processability.

Suggested Applications:

Landfill Liners
Tunnel Moisture Barriers
Gasoline and Chemical Tank Containment Liners
Mine Tailing Collection Projects

Nominal Physical Properties:

PROPERTY	ASTM TEST METHOD	ENGLISH		SI	
		Unit	Value	Unit	Value
Density	D1505	g/cc	0.938	g/cc	0.938
Melt Index, Condition E, 190°C/2.16 kg	D1238	g/10 min.	0.08	g/10 min.	0.08
190°C/21.6 kg (HLMI)	D1238	g/10 min.	12.0	g/10 min.	12.0
Tensile Yield Strength 2 in. per min., Type IV bar	D638	psi.	2,600	MPa	18
Elongation at Break 2 in. per min., Type IV bar	D638	%	850	%	850
Flexural Modulus, Tangent – 16:1 span:depth, 0.5 in./min.	D790	psi.	120,000	MPa	830
ESCR Condition B (10% Igepal), F ₅₀	D1693	h	>1,500	h	>1,500
Condition C (100% Igepal), F ₅₀	D1693	h	>1,500	h	>1,500
SP-NCTL	D5397	h	>1,000	h	>1,000
Durometer Hardness, Type D (Shore D)	D2240	Shore D	65	Shore D	65
Vicat Softening Temperature, Loading 1, Rate A	D648	° F	243	° C	117
Heat Deflection Temperature, 66 psi., Method A	D648	° F	138	° C	59
Brittleness Temperature, Type A, Type I specimen	D746	° F	<-103°F	° C	<-75°C
Tensile Impact Type S Bar	D1822	ft-lb/in ²	240	KJ/m ²	500

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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