Formosa Plastics®

Formolene® HDPE

Formolene® E6210C

High Density Polyethylene

Formolene® E6210C is a bimodal high molecular weight high density pressure pipe resin. It contains an enhanced additive package for increased oxidative resistance. When blended with the approved color concentrate, Formolene® E6210C complies with the following industry standards:

- Cell Classification: 445574C CC2 per ASTM D3350
- Material Rating Designation for E6210C
  - Per ASTM a PE 4710 resin with an HDB of 1,600 psi@73ºF and 1,000 psi @ 140ºF per PPI TR-4
  - Per ISO a PE 100 resin with an MRS 10 at 20ºC. It meets the requirements for a PE 100 compound as qualified by ISO 9080 and ISO 12162.
- Meets NSF 14 and 61.

Suggested Applications

Oil and Gas Gathering and Distribution; Chemical, Industrial and Mining; Sewer Systems

Nominal Physical Properties

PROPERTY	ASTM TEST METHOD	ENGLISH Unit	ENGLISH Value	*SI Unit*	*SI Value*
Density					
Natural	D1505	g/cc	0.948	*g/cc*	*0.948*
Pigmented Black		g/cc	0.957	*g/cc*	*0.957*
Melt Index, Condition E,					
Condition E, 190°C/2.16 kg	D1238	g/10 min.	0.04	*g/10 min.*	*0.04*
Condition F, 190°C/21.6 kg (HLMI)	D1238	g/10 min.	6.7	*g/10 min.*	*6.7*
Material Properties (Pigmented)					
Tensile Yield Strength					
2 in. per min., Type IV bar	D638	psi	>3,500	*MPa*	*>24*
Elongation at Break					
2 in. per min., Type IV bar	D638	%	>600	*%*	*>600*
Flexural Modulus,					
2% Secant	D790	psi	>115,000	*MPa*	*>793*
1% Secant	D790	psi	>135,000	*MPa*	*>931*
(16:1 span:depth, 0.5 in./min.)					
PENT	F1473	h	>2,000	*h*	*>2,000*
Thermal Stability Temperature	D3350	F	>500º	*C*	*260º*
Brittleness Temperature,					
Type A, Type I specimen	D746	F	<-95°	*C*	*<-70 °*
Notched Izod Impact @ 23ºC					
(1/8’ Specimen)	D256	ft•lb/in	9.1	*J/m*	*490*

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