Formosa Plastics®

Formolene® HDPE

Formolene® E6210F2

High Density Polyethylene

Formolene® E6210F2 is a bimodal high molecular weight high density pressure pipe resin. It contains an enhanced additive package for increased oxidative resistance in potable water systems. When blended with the approved color concentrate, Formolene® E6210F2 complies with the following industry standards:

- Cell Classification: 445574C CC3 per ASTM D3350
- Material Rating Designation for E6210F2
  - 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 for use with potable water systems

Suggested Applications

Potable Water; 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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