

Formolene® HP5221

High Density Polyethylene

Formosa Plastics Corporation, U.S.A.

Technical Data

Product Description

Formolene® HP5221 is a high performance copolymer that is designed for the most demanding requirements of corrugated pipe applications.

Formolene® HP5221 meets the requirements of the PPI third party certification program for use in AASHTO M 294 corrugated pipe.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
Search for UL Yellow Card	• Formosa Plastics Corporation, U.S.A. • Formolene®		
Availability	• North America		
Features	• Hexene Comonomer		
Uses	• Agricultural Applications	• Corrugated Pipe	• Piping
Agency Ratings	• AASHTO M294	• EC 1907/2006 (REACH)	
Forms	• Pellets		
Processing Method	• Compression Molding		

Physical	Nominal Value Unit	Test Method
Density	0.953 g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR)		ASTM D1238
190°C/2.16 kg	0.10 g/10 min	
190°C/21.6 kg	21 g/10 min	
Environmental Stress-Cracking Resistance		
Compression Molded ³	> 24.0 hr	ASTM F2136
100% Igepal, Compression Molded, F50	150 hr	ASTM D1693B

Mechanical	Nominal Value Unit	Test Method
Tensile Strength ⁴ (Yield, Compression Molded)	26.9 MPa	ASTM D638
Tensile Elongation ⁴		ASTM D638
Break, Compression Molded	> 600 %	
Flexural Modulus (Compression Molded)	1240 MPa	ASTM D790

Thermal	Nominal Value Unit	Test Method
Brittleness Temperature	< -90.0 °C	ASTM D746

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² Typical properties: these are not to be construed as specifications.

³ NCLS

⁴ Type IV, 50 mm/min