



Formolene® HB5502S1

Formosa Plastics Corporation, U.S.A. - High Density Polyethylene

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General Information

Product Description

Formolene® HB5502S1 HDPE resin is designed for applications requiring excellent stiffness and stress crack resistance properties. It may be used as a blow molding resin or sheet extrusion thermoforming resin.

Formolene® HB5502S1 meets all requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles intended for direct food contact.

General

Material Status	• Commercial: Active		
Availability	• North America		
Features	• Copolymer • Food Contact Acceptable	• Hexene Comonomer • High ESCR (Stress Crack Resist.)	• High Stiffness
Uses	• Automotive Applications • Blow Molding Applications	• Housings • Industrial Applications	• Sheet • Tanks
Agency Ratings	• EC 1907/2006 (REACH)	• FDA 21 CFR 177.1520	
Forms	• Pellets		
Processing Method	• Blow Molding	• Sheet Extrusion	• Thermoforming

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.955	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (190°C/2.16 kg)	0.25	g/10 min	ASTM D1238
Environmental Stress-Cracking Resistance (ESCR)			
Compression Molded, F50	35.0	hr	ASTM D1693B
100% Igepal, Compression Molded, F50	45.0	hr	ASTM D1693A
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ² (Yield, Compression Molded)	4000	psi	ASTM D638
Tensile Elongation ² (Break, Compression Molded)	> 600	%	ASTM D638
Flexural Modulus (Compression Molded)	200000	psi	ASTM D790
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -120	°F	ASTM D746

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type IV, 2.0 in/min