



Formosa Plastics®

# Formolene® HB5502S1

## High Density Polyethylene (HDPE) Resin Designed for Sheet Extrusion Applications

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.

### Suggested Applications:

*Molded or Formed...*

Industrial Housings & Parts

Automotive Shrouds

Tanks

### Nominal Physical Properties:

PROPERTY*	ASTM TEST METHOD	English		SI	
		UNIT	VALUE	UNIT	VALUE
Density	D1505	g/cc	0.955	g/cc	0.955
Melt Index, Condition E, 190°C/2.16 kg	D1238	g/10 min	0.25	g/10 min	0.25
Environmental Stress Crack Resistance (ESCR)					
Condition A, F <sub>50</sub> (100% Igepal)	D1693	h	45	h	45
Condition B, F <sub>50</sub>		h	35	h	35
Tensile Yield Strength	D638				
2" (50 mm) per min.	Type IV	psi.	4000	MPa	28
Ultimate Elongation	D638				
2" (50 mm) per min.	Type IV	%	>600	%	>600
Brittleness Temperature	D746	°F	<-120	°C	<-84
Flexural Modulus	D790	psi.	200,000	MPa	1378

\* Physical properties reported herein were determined on compression molded specimens prepared in accordance with Procedure C of ASTM D4703, Annex A1.

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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Any inquiries regarding this data sheet should be addressed to: 9 Peach Tree Hill Road • Livingston, NJ 07039 • Phone: (888) FPCUSA3

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