Formosa Plastics®

Formolene® HDPE

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 UNIT	English VALUE	SI UNIT	SI VALUE
Density	D1505	g/cc	0.955	g/cc	0.955
Melt Index, Condition E, 190ºC/2.16 kg	D1238	g/10 min	0.25	g/10 min	0.25
Environmental Stress Crack Resistance (ESCR)					
Condition A, F_{50} (100% Igepal)	D1693	h	45	h	45
Condition B, F_{50}		h	35	h	35
Tensile Yield Strength 2” (50 mm) per min.	D638 Type IV	psi.	4000	MPa	28
Ultimate Elongation 2” (50 mm) per min.	D638 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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