



Formolene® HBU4606U

High Density Polyethylene Resin (HDPE) Designed for Blow molding Applications

Formolene® HBU4606U is a hexene-based HDPE blow-mold resin made using gas phase technology. This grade has excellent long-term stress crack resistance and is formulated with UV stabilizer designed for intermediate bulk container applications.

Formolene® HBU4606U meets the requirements of the U.S. Food and Drug Administration as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact. For additional information on approved conditions of use for food contact applications, please refer to the “Products” section on our website (<http://www.fpcusa.com/ourproducts.html>).

Suggested Applications:

Intermediate Bulk Containers

Nominal Physical Properties:

PROPERTY*	ASTM TEST METHOD	English		SI	
		UNIT	VALUE	UNIT	VALUE
Density	D792	g/cm ³	0.946	g/cm ³	0.946
Melt Index (190°C, 21.6 kg)	D1238	g/10 min	6.0	g/10 min	6.0
Tensile Strength at Yield	D638	psi	3,150	MPa	21.7
Tensile Strength at Break	D638	psi	5,200	MPa	35.9
Tensile Elongation at Break	D638	%	>600	%	>600
Flexural Modulus at 1% Secant (0.5 inch/min)	D790	psi	143,000	MPa	986
Notched Izod Impact Strength at 23 °C, 3.3 mm plaque	D256	ft-lb/inch	10	kJ/m	0.53
Shore D Hardness	D2240		64		64
Vicat Softening Temperature	D1525	°F	253	°C	123
Heat Deflection Temperature at 66 psi Load	D648	°F	145	°C	63
Environmental Stress Crack Resistance (ESCR), Condition B, F ₅₀ (10%) (Igepal)	D1693	h	>1000	h	>1000

*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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