

# Hybrid<sup>®</sup> B3030U PC/Polyester Alloy Resin



### Product Attributes

- Chemical Resistance
- High Impact
- UV Resistance



<u>PROPERTY</u>	<u>METHOD</u>	<u>UNIT</u>	<u>VALUES</u>
<b>PHYSICAL</b>			
Melt Flow (260° C/5kg)	ASTM D1238	g/10min	32
Specific Gravity	ASTM D792	-	1.21
Water Absorption (24-HR Immersion)	ASTM D570	%	-
Mold Shrinkage (Flow Direction)	ASTM D955	In/in x 10 <sup>-3</sup>	-
<b>MECHANICAL @ 73°F</b>			
Tensile Strength, Yield	ASTM D638	psi <i>MPa</i>	9,200 63
Elongation, Break	ASTM D638	%	-
Flexural Modulus	ASTM D790	psi <i>MPa</i>	360,000 2,482
Flexural Strength, Yield	ASTM D790	psi <i>MPa</i>	14,000 97
Izod Impact Strength (@ 1/8", Notched)	ASTM D256	ft-lb/in <i>J/m</i>	13 694
Hardness	ASTM D785	-	-
<b>THERMAL</b>			
Heat Deflection Temp. (Unannealed)	ASTM D648		
66 psi		°F	-
0.5 MPa		°C	-
264 psi		°F	222
1.8 MPa		°C	106
<b>FLAME CLASS RATING</b>			
V-2 (Min. Tested Thickness)	UL 94	In (mm)	-

†The data listed here fall within the normal range of product properties, but they should not be used to establish specification limits or used alone as a basis for design. This information is not intended as a warranty of any kind. Buyers must make their own representative test and assume all risks of use, whether used alone or in combination with other products. Entec Polymers, LLC assumes no obligation or liability of any advice furnished by it or results obtained with respect to these products. All warranties expressed or implied including warranties of merchantability for a particular purpose or use are excluded and disclaimed. Entec Polymers, LLC assumes no liability for use of products in infringement of any patent. The foregoing limitation of remedy and exclusion of liability is reflected in and is part of the consideration for the price at which the products are sold by Entec Polymers, LLC. All data displayed herein has been obtained via testing of injection-molded specimens of natural color. Pigmentation may affect certain properties to various degrees.



A leading manufacturer of lawn and garden tractors was having quality and consistency issues with their current supplier of a Polycarbonate/Polyester alloy. The material is utilized on the front grill of many of their units and is designed to be a functional structural cover and head light mount. This is a large and highly visible part necessitating an attractive surface finish. Because of its location relative to the engine, resistance to gas, oils, and high temperatures are also part of the requirements. Additionally, due to frequent exposure outdoors, UV resistance must be included as part of the performance criteria.

Entec Engineered Resins having a high degree of exposure and familiarity with the lawn and garden industry was given a chance to support the application. Our B3030U compound was sampled, qualified, and is now an active and successful part of this application system.