



Hybrid[®] B2025I



Product Attributes

- Good Surface Finish
- Color Temperature Property Retention
- UL94HB

PROPERTY	METHOD	UNIT	VALUES
PHYSICAL			
Melt Flow Index (260°C/5kg)	ASTM D1238	g/10min	25
Specific Gravity	ASTM D792	-	1.17
Water Absorption (24 - Hr Immersion)	ASTM D570	%	-
Mold Shrinkage (Flow Direction)	ASTM D955	In/in X 10 ⁻³	-
MECHANICAL@ 73°F*			
Tensile Strength, Yield	ASTM D638	psi	7,500
		MPa	52
Elongation at Break	ASTMD638	%	-
Flexural Modulus	ASTM D790	psi	270,000
		MPa	1,862
Flexural Strength, Yield	ASTM D790	psi	10,500
		MPa	72
Izod Impact Strength (@ 1/8", Notched) Room Temperature	ASTM D256	ft-lb/in	14
		J/m	747
		ft-lb/in	11.5
		J/m	614
		ft-lb/in	10
		J/m	534
-30°C	ft-lb/in	10	
	J/m	534	
-40°C	ft-lb/in	9	
	J/m	480	
-50°	ft-lb/in	9	
	J/m	480	
Hardness (Rockwell M)	ASTM D785	-	-
THERMAL			
Heat Deflection Temp. (Unannealed) 66 psi 0.5 MPa 264 psi 1.8 Mpa	ASTM D648	°F	-
		°C	-
		°F	192
		°C	89
Vicat Softening Temperature	ASTM D1525	°F	-
		°C	-

*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.



HYBRID® B2025I

A global leader in the production of household and commercial fire extinguishers had discovered that the traditional impact grade of ABS from which the chemical discharge horn was molded, would no longer pass critical tests for cold temperature impact resistance. Challenging their molders to come up with a superior material for the application, they were introduced to the Hybrid® line of Polycarbonate alloys manufactured by Entec Engineered Resins.

The specific grade, Hybrid® B2025I, was of particular interest because of its special attribute of cold temperature impact retention. B2025I was one of five materials that were being evaluated in the application. At the end of the test period, it was the only one that successfully passed the battery of exposures and impacts.

While the OEM was in the process of adding the Hybrid® grade to their specification prints, Entec submitted for and was granted the UL94 HB rating that was also part of the requirement.

Becoming the selected material, B2025I now affords this manufacture the confidence in a material that will perform well under critical circumstances in harsh environments.