

# Quantum Lytex HTG 4202 BK E

Engineered Composites



## Product Description

E-glass reinforced epoxy molding compound designed for applications at elevated temperatures.

## General

Material Status	• Commercial: Active		
Availability	• North America	• Europe	• Asia Pacific
Filler / Reinforcement	• E-glass Fiber	• Nominal 63% w/w	• Nominal 1/2" (12.5 mm) Length
Features	• Fatigue Resistance • High Strength	• High Stiffness • Shelf Life 6 months @ 10°F or below	• Black or Natural Color
Processing Method	• <b>Lytex 9063 BK-E High Tg</b> can be molded at temperatures in the range of 280-330°F, with 310°F suggested as a starting point. Cure times will be dependent on molding temperature and part thickness and will typically be 10-15 minutes. Detailed molding suggestions are available on request. Cool molded parts at ambient temperature. A cooling fixture may be needed depending on part thickness and geometry. Matched metal molds.		
Resin	• Epoxy		

Physical	Typical Average Lot	Unit	Test Method
Density	1.84	g/cm <sup>3</sup>	ASTM D792
Shrinkage	<0.001	in/in	ASTM D955
DEA Gel/Cure	13.8/117.4	Seconds	
Barcol Hardness	75	Barcol Units	ASTM D2583
Mechanical (As Molded) @25C	Typical Average Lot	Unit	Test Method
Tensile Modulus	4.005 E+6 (27,600)	psi (MPa)	ASTM D639
Tensile Strength	37,500 (258.6)	psi (MPa)	ASTM D639
Flexural Modulus	3.296 E+6 (22,752)	psi (MPa)	ASTM D790
Flexural Strength	77,200 (532.3)	psi (MPa)	ASTM D790
Mechanical (As Molded) @150C	Typical Average Lot	Unit	Test Method
Tensile Modulus	3.18 E+6 (21,925)	psi (MPa)	ASTM D639
Tensile Strength	27,775 (191.5)	psi (MPa)	ASTM D639
Flexural Modulus	2.676 E+6 (18,450)	psi (MPa)	ASTM D790
Flexural Strength	55,680 (383.9)	psi (MPa)	ASTM D790
Mechanical (As Molded) @175C	Typical Average Lot	Unit	Test Method
Tensile Modulus	2.908 E+6 (20,500)	psi (MPa)	ASTM D639
Tensile Strength	25,865 (178.3)	psi (MPa)	ASTM D639
Flexural Modulus	2.173 E+6 (14,982)	psi (MPa)	ASTM D790
Flexural Strength	39,980 (275.7)	psi (MPa)	ASTM D790
Mechanical (As Molded) @200C	Typical Average Lot	Unit	Test Method
Tensile Modulus	2.59 E+6 (17,857)	psi (MPa)	ASTM D638
Tensile Strength	18,525 (127.7)	psi (MPa)	ASTM D638
Flexural Modulus (RT)	1.915 E+6 (13,203)	psi (MPa)	ASTM D790
Flexural Strength	26,900 (185.5)	psi (MPa)	ASTM D790
Impact Typical Average @25C	Typical	Unit	Test Method
Izod Notched Impact Strength	35 (1869)	ft-lb/in (J/m)	ASTM D256

## Technical Data Sheet

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Thermal	Typical	Unit	Test Method
Glass Transition T <sub>g</sub> , Tan Delta	427 (219.5)	°F (°C)	ASTM D7028

Note: Properties taken from  
Specimens Post-Cured @ 240C  
for 4 hours

### Notes

These are typical property values not to be construed as specification limits.

### Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

### Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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