

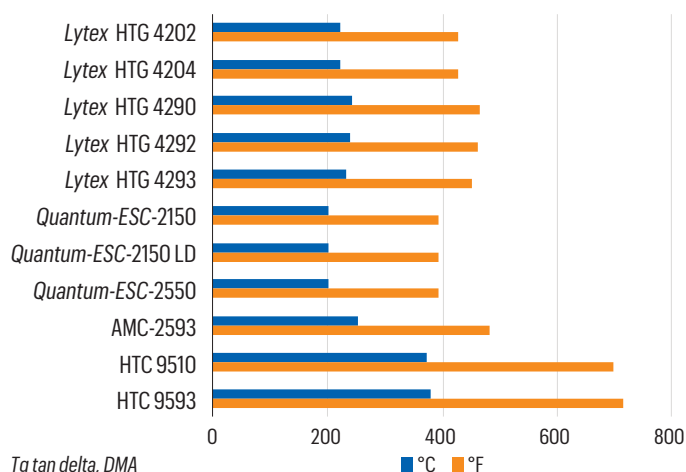
Engineered composites materials properties summary

LYB advanced composites redefine lightweight performance, offering up to 45% less weight than aluminum and up to 200% more strength than traditional SMC.

With exceptional dimensional stability and ultra-low thermal expansion, our composites provide precision for demanding applications while lowering costs through faster cycles, less scrap and higher efficiency.



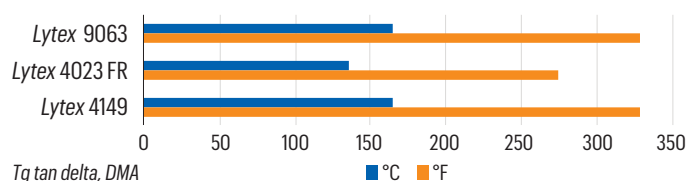
Glass transition temperature



Material reference	Fiber % w/w	Fiber length (inches / mm) & Type	Description	Features , benefits & applications
Epoxy - Fiberglass E grade				
Lytex HTG 4202	63%	0.5 / 13 E glass	E-glass reinforced epoxy molding compound designed for applications at elevated temperatures.	Aerospace secondary and tertiary components, fairings, brackets, etc. Industrial, high temperature / high pressure. Suitable for molding thick cross sections (3" +). Flame retardant & and high temperature resistant
Lytex HTG 4204	63%	0.5 / 13 E glass		
Epoxy - Carbon Fiber - PAN based std modulus				
Lytex HTG 4290	55%	1 / 25 12K	Carbon fiber reinforced epoxy molding compound designed for applications at elevated temperatures.	Aerospace secondary and tertiary structures, components, fairings, brackets, panels. Advantages of Lytex resin system with light weight and stiffness of carbon fiber.
Lytex HTG 4292	55%	2 / 51 12K		
Lytex HTG 4293	55%	1 / 25 3K		
Phenolic - Fiberglass E grade				
Quantum-ESC 2150	50%	1 / 25 E glass	FAR 25.853 (FST) compliant	Interior of mass transit (air, rail, etc.)
Quantum-ESC 2150 LD	25%	1 / 25 E glass	Low density - FAR 25.853 (FST) compliant	Interior of mass transit (air, rail, etc.), used for crush-core molding. Co-molding with phenolic prepreg.
Quantum-ESC 2550	50%	1 / 25 E glass	Flame smoke & toxicity (FST) properties	Industrial, low flammability elevated temp applications
Phenolic - Carbon Fiber - PAN based std modulus				
AMC 2593	45%	1 / 25 3K	FAR 25.853 (FST) compliant	Structures for aircraft interiors & mass transit
Bismaleimide (BMI) - Fiberglass E grade				
HTC 9510	50%	1 / 25 E glass	High temperature composite, Tg > 375°C	High temperature / high pressure, industrial, aero
Bismaleimide (BMI) - Carbon Fiber - PAN based std modulus				
HTC 9593	50%	1 / 25 3K	High temperature composite, Tg > 375°C	High temperature / high pressure, industrial, aero

Material reference	Fiber % w/w	Fiber length (inches / mm) & Type	Description	Features , benefits & applications
Epoxy - Fiberglass E grade				
Lytex 9063	63%	0.5 / 13 E glass	Short cure time for complex geometry molded parts solutions.	Aerospace secondary and tertiary components, fairings, brackets, etc. Industrial, high temperature / high pressure. Suitable for molding thick cross sections (3" +). Flame retardant & and high temperature available
Lytex 4023FR	63%	0.5 / 13 E glass		
Epoxy - Carbon Fiber - PAN based std modulus				
Lytex 4149	55%	1 / 25 3K	Lytex 4149 is specified by numerous aero & military OEMs	Aerospace secondary and tertiary structures, components, fairings, brackets, panels. Advantages of Lytex resin system with light weight and stiffness of carbon fiber. Flame retardant version available.

Glass transition temperature



About us

We are LyondellBasell (LYB) – a leader in the global chemical industry creating solutions for everyday sustainable living. Through advanced technology and focused investments, we are enabling a circular and low carbon economy. Across all we do, we aim to unlock value for our customers, investors and society. As one of the world’s largest producers of polymers and a leader in polyolefin technologies, we develop, manufacture and market high-quality and innovative products for applications ranging from sustainable transportation and food safety to clean water and quality healthcare. For more information, please visit www.lyb.com or follow @LyondellBasell on LinkedIn.

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