



E-GO™ in Polyester+Glass Fiber Systems

MITO® Material Solutions' flagship product, E-GO, has been designed with versatility, realistic solutions, and accessibility in mind. E-GO is a hybridized graphene oxide/POSS additive which reactively disperses while resisting agglomeration -- unlocking the properties of graphene for various industries by utilizing both thermoset and thermoplastic polymer composites. Using a MITO Powered™ polyester system, you can replace harder to handle vinyl ester to create high performing, low cost composites to enable the next generation of materials.

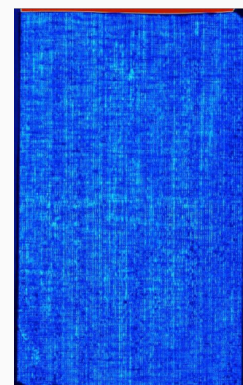
DISPERSION & INTEGRATION

E-GO has been designed to seamlessly integrate into your manufacturing method:

- Shear mixing
- Three roll milling
- Spray applications

Simply measure and mix as normal **at loadings as low as 0.1%** by weight of resin.

ULTRASONIC DENSITY CHECK: 0.1% WT E-GO



LEFT: IMAGE OF PANEL

RIGHT: ULTRASONIC CHECK OF SAME

COLLABORATION

EXPLORE

We want to work with you and know your story. MITO partners with a variety of industries interested in enhancing material performance. In order for us to help, we need to understand your current materials, processes, and goals so we can recommend the best MITO solution for your needs.

EVALUATE

Once we establish the benchmarks in your polymer system, MITO can create samples and deliver a custom data set showing a direct comparison. If preferred, our team can also work directly with your team at your facility.

COLLABORATE

MITO solutions are designed to integrate into the base polymer – before part production – and can be distributed commercially via direct sales or by distributing through your polymer supplier/compounder. This ensures seamless integration into your supply chain without added time or process interruption.

CREATE CUTTING EDGE, EASY-TO-USE MATERIALS WITH E-GO



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TESTING METHOD	PROPERTY	UNITS	CONTROL	0.1%wt E-GO	% DIFFERENCE
TENSILE ASTM D3039	Maximum force withstood	kN	234.42	314.40	29%
	Modulus at break	MPa	19650	21650	10%
	Strain at break	%	-	-	-
FLEXURAL ASTM D790	Maximum force withstood	kN	0.17	0.21	21%
	Modulus at break	MPa	21959	34743	45%
	Strain at break	%	0.5	0.4	-22%
COMPRESSION ASTM D6641	Maximum force withstood	kN	195.81	162.72	-18%
	Modulus at break	MPa	24821	22753	-9%
	Strain at break	%	0.85	0.77	-9%
IMPACT ASTM D256	Izod impact resistance	J / m	1126	1004	-12%
FRACTURE TOUGHNESS	G _{IC}	kJ / m ²	-	-	-
DYNAMIC MECHANICAL ASTM D7028	Storage modulus	MPa	1556	2026	26%
	Viscous modulus	MPa	-	-	-
	Dampening coefficient		0.76	0.72	-5%
GLASS TRANSITION TEMP ASTM D7028	T _G	°C	93	105	12%
ELECTRICAL RESISTIVITY	Resistivity through plane	Ohm · m	-	-	-
	Resistivity in plane	Ohm · m	-	-	-

* All tests were conducted according to ASTM standards.

**Samples: DCPD polyester, 1.5% MEKP, 2x2 Twill FG made via hand layup

Not seeing a property you need? Contact MITO with any inquiries and our team will work with you and your engineers to design a study with your specific material requirements in mind.