
Product: | ORCA GPET |
Trade Name: | RECYCLABLE STRUCTURAL FOAM |

Supplier: Fiberlay Inc.
24 S. Idaho St.
Seattle, WA 98134
(206) 782-0660

DESCRIPTION: ORCA GPET is a highly adaptable, recyclable, thermoplastic core material with good balance of mechanical properties, temperature resistance, density and cost for a wide range of applications and processes. GPET is compatible with a wide range of resin systems including epoxy, vinyl ester, unsaturated polyester and phenolic resins. GPET can be processed at high temperatures, withstanding exotherms up to 300°F and offers outstanding fatigue properties, chemical resistance, good adhesion and is a highly consistent extruded foam. Applicable processing techniques include vacuum infusion, bonding, prepreg and thermoforming.

APPLICATIONS:

- Wind Energy
- Marine
- Industrial
- Transportation

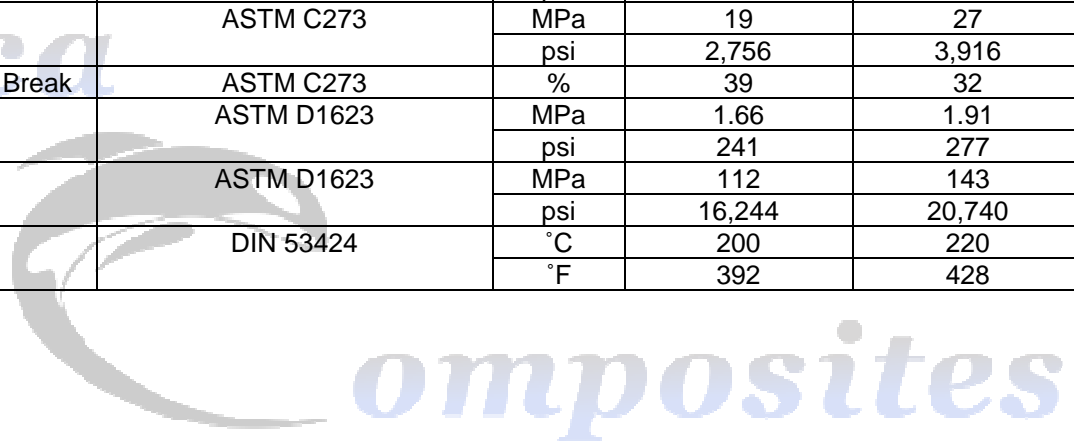
FEATURES:

- Compatible with all types of composite processes
- Extensive product range
- Good Adhesion
- Recyclable
- Excellent chemical properties
- Withstands high process temperatures
- Cost effective

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MECHANICAL PROPERTIES

Type	Test Method	Units	GPET 090	GPET 110
Density	ISO 845	kg/m ³	94	114
		lb/ft ³	5.9	7.1
Density Range	ISO 845	kg/m ³	89-99	109-119
		lb/ft ³	5.6-6.2	6.8-7.4
Compressive Strength	ASTM D1621-2010 (ISO 844)	MPa	1.27	1.71
		psi	184	248
Compressive Modulus	ASTM D1621-2010 (ISO 844)	MPa	60	77
		psi	8,702	11,168
Compressive Modulus	ASTM D1621b-1973	MPa	95	120
		psi	13,779	17,405
Shear Strength	ASTM C273	MPa	0.70	0.94
		psi	102	136
Shear Modulus	ASTM C273	MPa	19	27
		psi	2,756	3,916
Shear Elongation at Break	ASTM C273	%	39	32
Tensile Strength	ASTM D1623	MPa	1.66	1.91
		psi	241	277
Tensile Modulus	ASTM D1623	MPa	112	143
		psi	16,244	20,740
HDT	DIN 53424	°C	200	220
		°F	392	428



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