



*"YOU SUPPLY THE TALENT... WE'LL SUPPLY THE REST!"*  
**THE COMPLEAT SCULPTOR**

**Tech Sheet - AquaResin® AquaGlass (AQG™) Chopped Fiberglass Strand  
(Strand Lengths: 0.5", 1", 4.5")**

**DESCRIPTION**

AQG™ chopped strand is a unique fiberglass reinforcement material. Its proprietary surface sizing allows easy dispersion in all Aqua- Resin® mixes, as well as promoting a significantly stronger bond between the cured Aqua-Resin®, and the glass fiber itself.

When properly applied and cured, laminations with AQG™ fiberglass exhibit substantially stronger break strength than can be achieved with conventional fiberglass, and therefore permit a reduction in laminate wall thickness - affording a saving in both weight and material cost, as well as a savings in labor.

AQG™ chopped strand is available in three lengths: ½"(0.5), 1"(1.0), and 4-1/2" (4.5).

**INSTRUCTIONS**

**Gel Coats**

The first coat into a mold often needs reinforcement, especially in the case of silicone rubber molds. Into a normal Aqua-Resin® mix, add a small amount (approx. 0.5%) of the (1/2") AQG™-0.5 glass fiber. Stir until the mix appears to "gel". Then brush apply with a scrubbing and dabbing motion. This gel coat layer usually need be no more than 15-30 mils thick (1/64-1/32").

AQG™ glass fiber will not "print through" on the surface of your laminate, as will ordinary chopped fiberglass.

**Laminating Coats**

For optimum strength in the laminating (reinforcing) layers of a composite part, AQG™-4.5 is recommended. This length strand can be used in much the same way as conventional chopped strand mat. As with any Aqua-Resin® hand lay-up, first a heavily applied mix is laid down. Then the AQG™ is applied, and immediately tamped down with a brush so that the underlying mix is brought up through the fibers, assuring a thorough wet-out. The use of a hard finned fiberglass roller of appropriate contour is highly recommended as an adjunct to the tamping procedure.

When applying AQG™ fibers, successive layers should be oriented at a 45 or 90-degree angle to the previous one. Unlike chopped strand mat, AQG™ fibers can be aligned within the part to produce the strongest configuration of reinforcement.

(In situations where a 4-1/2" fiber may be too long, 1" AQG™ 1.0 may be substituted, although there will be diminished break and impact strength in the cured laminate.)

**Foam Coating\***

Either AQG™-0.5 or 1.0 fibers can be incorporated into an Aqua-Resin® mix for foam coating. A 0.5% addition is typical. Mix until the "gel-point". Then brush apply with both a dabbing and pushing motion. A second, un-fibered, mix may then be applied, to allow extra material for removal by sanding operations.

\*See AQG-FCV™ instruction sheet for other foam coating options.

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