



Portable Mylar/Kevlar Collapsible Tanks

Our bioreactors are a patent-pending technology made of laminated Mylar with Kevlar/Carbon Fiber mesh.

The tanks are light, collapsible and portable. They may be used to store a multitude of materials and have been tested with water, gasoline, alcohol and various food products with no detrimental effects on the products being contained or to the tank.

Custom Sizes

The tanks were designed as photo bioreactors at 4 foot diameter by 20 feet tall to grow algae for mitigation of Greenhouse Gas emissions. At this scale, the tank weighs 65 pounds and holds 1800 gallons of water

The tanks can be produced at other sizes to address specific applications, or in standard tank sizes such as 10'x10', 30'x30' tank size or larger.

Strength and Durability

Tank materials hold up to 7000 lbs. force, the tank seams have been tested to hold beyond the wall material breaking forces.

The tanks were installed and tested outside for 6 months during Maryland winter months, then moved indoors and used as photo bioreactors to grow algae during the last 6 months with no signs of degradation.

While it is recommended that the tanks be installed within a “shell” building for long term use, short term outdoor use is acceptable. An addition of a UV protective layer will allow the tanks to last longer for outdoor use.

Benefits

The tanks are manufactured in the U.S and cost at least 75% less than an equivalently sized stainless steel tank.

Given the portable and collapsible nature, the tanks can be installed inside buildings with no cranes required. Further, the tanks can be detached at the bottom when empty and raided for cleaning and service in place.

Availability

Lead time for manufacturing requires no more than 1 month and can be installed in one day.

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