



### SPECIFICATIONS

Aqua-Pak "fixed film" biological treatment media is molded from a strong, light-weight, thermoplastic resin (polypropylene) and is suitable for wastewater treatment applications. The product is non-toxic to micro-organisms, immune to rot, fungus and chemically resistant to normal concentrations of sewage acids, alkalis, organic solvents and organic compounds. Also, it has a high resistance to ultra-violet degradation, aging, erosion and disintegration.

Each individual piece of media shall be of a cylindrical configuration with a diameter dimension in excess of 2.5 times its height dimension. It will have 4 continuous internal radial ribs and 2 concentric circular sections. The outer wall of each piece being formed by eight sections of arc approximately 1.25 inches in order that adjacent pieces of media do not occlude or block off contacting sections of surfaces.

When installed with the manufacturer's instructions, the media configuration will supply uniform passage of air and wastewater in all directions. The media will have an effective surface area of 30 ft<sup>2</sup>/ft<sup>3</sup> and a volumetric void ratio of 95%.

To insure adequate contact time and liquid film diffusion, Aqua-Pack is capable of redistributing the wastewater horizontally, and throughout a 360 degree field, a minimum of one foot per foot of media depth. Aqua-Pack provides a minimum of 300 mixing and redistribution points for both air and wastewater

per cubic foot of media. The media is designed to orientate within the filter so that no surface generates a continuous vertical or horizontal position. The maximum depth to width ratio on any aperture will be 3:1 and minimum internal opening dimension will be 0.875 inches.

Raw material used in production of the media will meet or exceed the following physical properties:

- Heat deformation: ASTM-D648 245 F at 66PSI
- Tensile yield: ASTM-D638 4750 PSI
- Specific Gravity: ASTM-D792 .91 to .93
- Flammability: ASTM-D635 Slow

The media shall be the product of a manufacturer who has been regularly engaged in design, production, and installation of thermoplastic media for the purpose of biological wastewater treatment in excess of 10 years.

1. Any material used to manufacture the media other than polypropylene will be rejected.

2. Any media requiring cutting or shaping will not be accepted.

