

## INSTALLATION INSTRUCTIONS FOR PERMA-BEAD® MEDIA

- 1. Open the top of the filter canister. If the filter already contains sand, remove all sand and gravel, being careful not to break the lateral spokes on the bottom of the filter.**
- 2. Cover the plastic hub on top to prevent beads from entering. An inverted cup or bowl usually works well.**
- 3. Open the boxes of Perma-Beads® and carefully pour into the filter.**
- 4. Make sure that no beads remain on the sealing ring.**
- 5. Seal the filter and start the system.**

Perma-Beads® are so slippery that they take several days to actually become “wet”. It is therefore suggested that the filter is allowed to run without backwash for several days. It is also recommended that, due to the significant variation in different pump pressures, flow rates, plumbing fittings, and piping runs in different systems, a net or stocking be placed on the end of the backwash pipe before the first backwash, just in case an excessive number of beads are present.

A handful of chaff beads is common in the first backwash. Occasionally, a mismatched system creates excessive flow rates due to an oversized water pump or various pipe and plumbing combinations. Should many beads continue to be present upon backwash, then slightly close the discharge valve located on the top of the water pump to reduce the flow rate. If a valve is not present, purchase a ball valve, preferably with union fittings, that threads onto the top of the water pump (discharge). After about one month of operation, the Perma-Beads® will have reached a steady state, and the valve can usually be opened to full flow.

It is highly recommended that a short backwash once or twice a week for 20 - 30 seconds be used instead of long backwashes at lengthy intervals. Clear water in the filter sight glass should be your guide for when to stop the backwash. These short backwashes remove the captured waste from the system to maintain water quality, prevent the colonization of possible pathogens in the filter, and “fluff up” the filter bed, thereby preventing compaction. They also save thousands of gallons of water over many years of use.

Your Perma-Beads® are truly permanent, chemically inert, and non-reactive. Should it ever be necessary, Perma-Beads® can be sterilized with chlorine to return them to their original state, even after years of continuous use.