



COMPARISON SHEET

Plastic liners are commonly used to contain water where native soils will not. Unfortunately, these low-cost liners only offer a short term answer. By combining a flexible plastic membrane with a layer of bentonite clay, **Akwaseal®** provides a more permanent solution.

Property	Plastic Membrane PVC, HDPE, LLDPE, EPDM	Akwaseal Pond Liner	Comment
Leakage Rate	Up to 4,500 gallons per acre per day assuming a few small punctures.	Approximately 40 gallons per acre per day even when punctured.	Holes in plastic membranes can leak excessively. Akwaseal is self-healing. The bentonite inside seals the defects resulting in greatly reduced leakage when the liner is accidentally punctured during or after installation.
Puncture Resistance	30 – 100 lbs, depending on type and thickness	110 lbs, with strength gained from composite construction.	Akwaseal has a higher puncture resistance than all but the thickest plastic liners.
Life Expectancy	Varies depending on type of plastic and exposure	Indefinite when properly installed beneath one foot of soil cover.	Some plastic liners contain plasticizers which can leach out of the liner causing it to become brittle and easily damaged. Other plastic liners will deteriorate with long-term exposure to sunlight or daily temperature variations. Akwaseal under a soil cover will not be affected by these conditions and its bentonite clay component formed by sea water and volcanic ash is already over 100 million years old!
Ease of Installation	Requires experienced installers to seam panels, seal penetrations, and check for leaks/holes.	Can be properly installed by unskilled labor. Penetrations and detail seals are easily handled with accessory bentonite.	Akwaseal's simple overlapped seams make it far easier to install than plastic membranes, whose panels must be heat-welded or solvent-glued. Plastic membranes must be fastened to concrete walls or other structures, which is difficult and time-consuming. Akwaseal is sealed to these structures simply by direct contact with the addition of supplemental bentonite.



August 2005

800.527.9948 Fax 847.851.1899

For the most up-to-date product information, please visit our website, www.akwaseal.com. A wholly owned subsidiary of AMCOL International Corporation. The information and data contained herein are believed to be accurate and reliable, CETCO makes no warranty of any kind and accepts no responsibility for the results obtained through application of this information.