TECHNICAL BULLETIN

>> WATER HAMMER ARRESTERS

SUBJECT: O-Rings in Sioux Chief Arresters **DATE:** August 2017 **PAGE:** 1 of 1

Recent publications have brought up the fact that the EPDM material in certain products is subject to attack from high levels of chloramines. This may be true for certain products, but does not affect Sioux Chief water hammer arresters. If the product application is such that it is "highly exposed" to chloramines, and the product is poorly processed or made from low quality EPDM, then it may certainly be more susceptible to deterioration. However, Sioux Chief arrester O-rings are NOT highly exposed at all, and are made to high quality material and performance standards. Consider the following:

- The failure stories are mostly associated with "high-exposure" products such as toilet flappers, etc., where 100% of the surface area is exposed to the water.
- The application of O-rings in our arrester is such that there is very little surface exposure to the water. The second O-ring has zero exposure to the water.
- Our O-rings are pressure packed with a good amount of Dow Corning F-111 Silicone lubricant which completely covers the O-rings in a protective film.
- There are various quality levels of EPDM O-rings. Sioux Chief uses only high quality O-rings that pass our tough material and performance standards.
- Sioux Chief has NEVER experienced an EPDM O-ring failure due to attack from chemicals such as chloramines in the 25 year history of the arrester product line.
- EPDM is by far the most widely used material for O-rings in plumbing fittings around the world.
- Viega uses EPDM for all their ProPress Fittings, (used in Europe for over 30 years where high levels of chloramines are common.)
- Cash Acme uses nothing but EPDM O-rings for all their SharkBite fittings, (used in Europe and Australia for over 20 years.)
- There are literally billions of EPDM O-rings out there in service right now in faucets, valves, etc. in use for decades.

The information contained herein is believed to be reliable, but is subject to change without notice. No guarantees of any kind are made as to its accuracy, suitability for particular applications or conclusions obtained therefrom. Before use or installation, the user shall determine the suitability of the information for the intended purpose, and shall assume all risk and liability in connection therewith. Use of any/all Sioux Chief product shall be in accordance with supplied instructions, common practices, local codes and legal requirements.

