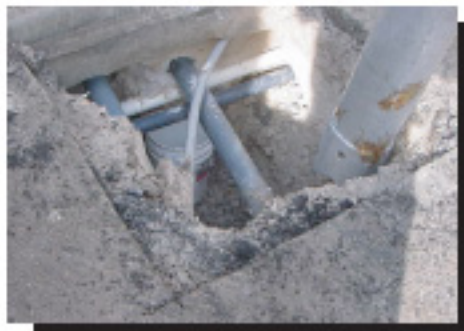


Safety Alert!

Potential System Failure May Result from 98+% Sulfuric Acid
Ultra Proline- Halar (E-CTFE) Piping System is the solution!



98% Sulfuric Acid Damages System in Florida Water Treatment Plant

We do not recommend PVDF for 98%+ Sulfuric Acid that contains SO₃. Failures may occur in a matter of a few days or longer based upon the following two factors:

1. The amount of "Free Sulfur Trioxides present in the fluid
2. The amount of built-in stress present in the PVDF material

We do, however recommend HALAR (E-CTFE) for this application.

HALAR® E-CTFE is essentially a 1:1 alternating copolymer of ethylene and CTFE (chlorotrifluoroethylene). It contains about 80% CTFE, one of the most chemically resistant building blocks that can be used to make a polymer. It is most likely the best material for handling high concentrations of sodium hypochlorite, sulfuric acid and sodium hydroxide. Additionally, E-CTFE has good electrical properties and a broad-use temperature range.

Severe stress tests have demonstrated that Halar is not subject to chemically induced stress cracking from strong acids, bases, or solvents. Only hot amines and molten alkali metals affect Halar.

Check with your chemical supplier to ensure that you are not receiving a true 98%+ Concentration of Sulfuric Acid.

If you are using Sulfuric Acid at or above 98% concentration, contact Asahi/America for material recommendation based on your system design and operating parameters.

Halar is the only material resistant to 98%+Sulfuric Acid

Recently, it has come to our attention that some chemical suppliers have been shipping a True 98% + concentration of Sulfuric Acid instead of Baume 66 Sulfuric Acid to Water, Wastewater, and R/O Plants in Florida. The Baume 66 classification of Sulfuric Acid, by definition will never be greater or equal to a true 98%+ concentration of Sulfuric Acid, while the "True" 98%+ Sulfuric Acid is just that, 98% or greater concentration.

Please note that this change in chemistry can potentially cause failures in the piping systems currently in use. Specifically, the piping materials that may be affected are: PVC, CPVC, and PVDF.

The nature of the problem is the presence of a "Free" Sulfur Trioxide (SO₃) which is known to exist in concentrations of Sulfuric Acid at or above 98%. Effectively, "Free" Sulfur Trioxide do not exist at concentrations below 98%. This is why for years there have been no problems with sulfuric acid is from 93% to 98% concentration. "Free" Sulfur Trioxide is a Stress Cracking Agent for PVDF, PVC and CPVC materials.



Please contact Asahi/America for further Ultra Proline details and system options should you be receiving true 98%+ Sulfuric Acid.

ULTRA PROLINE

Asahi's trade name for their HALAR Piping System is Ultra Proline. Ultra Proline Piping Systems are available in both single and double-wall configurations and in sizes from 1" through 4" (32-225mm) with Butt Fusion as the primary joining method. Pressure rating for pipe and fittings, unless otherwise noted, shall be 150 psi (10 bar) for sizes from 1" to 1½", and 120 psi (8.3 bar) for sizes 2" (63mm) and above.

To Learn More Visit Us on the Web at:

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