

## **Arkema Develops Kynar® ADX Technology for Bonding PVDF to Polyolefin Resins**

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King of Prussia, PA -- ARKEMA has developed a Kynar® ADX resin technology for bonding Kynar® polyvinylidene fluoride (PVDF) to polyolefin resins in potable water piping. Kynar® ADX allows manufacturers to produce multi-layer pipe which utilizes the excellent barrier properties of Kynar® PVDF for other polymer structures.

Kynar® PVDF resin can be extruded and bonded as a barrier layer to a polyolefin multi-layer pipe system, which can meet the requirements of municipalities and water companies to distribute consistent, high-quality potable water to consumers with less leakage.

This multi-layer piping combines the benefits of polyolefins (high flexibility, therefore supplied in coils for easy installation), and the performance of Kynar® PVDF resin, which offers high chemical resistance, high purity, low biofilm formation, long service life, and very low permeation (for safer transport of water through contaminated ground). This product resists disinfectants such as chlorine, chlorine dioxide, chloramines, sodium hypochlorite, hypochlorous acid, and other aggressive chemicals added to drinking water. Nearly 100 miles of this multi-layer piping has been installed with total satisfaction from end-users and municipalities.

Kynar® PVDF is a performance polymer that offers high chemical resistance, high purity, good abrasion, and thermal resistance, for use in a multitude of applications. Products are easily melt-processed into pipe, fittings, valves, nozzles, and pumps, and can easily be cast into flat sheet and hollow fiber membranes or drawn into mono- or multi-filament fiber for wovens and nonwovens. Kynar® PVDF is well known in the industry for resistance to cleaning and disinfection agents such as bromine, chlorine, chlorine dioxide, ozone, peroxide, acids, alcohols and combinations of the above. Kynar® PVDF components also exhibit excellent resistance to sterilization techniques that use ozone, UV, radiation, and steam.

Kynar® PVDF and Kynar Flex® PVDF comply with the National Sanitary Foundation International standards and legislation in the U.S. and in Europe.

Kynar® PVDF components are used in a variety of water related applications, including harsh chemical injection systems, as well as water transfer, filtration, and containment.

## About Arkema

A global chemical company and France's leading chemicals producer, Arkema is building the future of the chemical industry every day. Deploying a responsible, innovation-based approach, we produce state-of-the-art specialty chemicals that provide customers with practical solutions to such challenges as climate change, access to drinking water, the future of energy, fossil fuel preservation and the need for lighter materials. With operations in more than 40 countries, some 14,000 employees and 10 research centers, Arkema should generate annual revenue of approximately \$8.3 billion, and holds leadership positions in all its markets with a portfolio of internationally recognized brands.

Source: Arkema