



King of Prussia, PA – January 21, 2021

## Arkema Inc. and Polymer Engineering Company Ltd. develop technology to blend Kynar Flex® PVDF with rubber

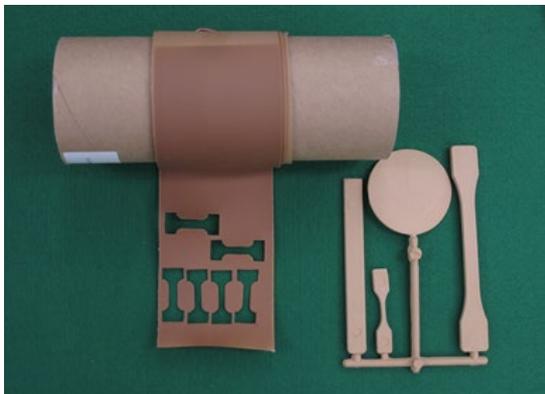
**Arkema Inc. and Polymer Engineering Company Ltd. have developed the capability to blend high performance Kynar Flex® PVDF with various types of rubber. The combination of a thermoplastic fluoropolymer with rubber materials allows melt processing through chemical compatibilization and vulcanization. The capability to create various fluoropolymer and rubber combinations results in products that have a range of properties provided by each respective component.**

Kynar Flex® PVDF fluoropolymers impart high chemical resistance, resistance to swelling, UV resistance, high heat stability, high contact angle and good release properties. Rubbers can impart a range of other favorable properties such as impact strength, flexibility, strain recovery, electrical resistance, lightweight, softness and compressibility. The final combination of properties can be tailored by the selection of the base fluoropolymer and the rubber, or combinations of rubbers, which will determine overall cost and performance.

These blends of Kynar Flex® PVDF and rubber can be extruded into profiles and/or injection and compression molded at temperatures similar to polyolefin thermoplastics.

“Many industries, such as the fuel and chemicals sectors, are challenged by changes that occur related to regulation modifications and technology-related upgrades,” said Marek Gnatowski Ph.D., president, Polymer Engineering Company. “Materials of construction that may have been previously considered reliable for long-term service in 2015 are then determined to be no longer suitable as the contact chemicals are altered for future use. The ability to blend rubber with a high performance fluoropolymer allows the system designer to keep the friendly properties of rubber without early cracking or swelling failures in service.”

Arkema Inc. and Polymer Engineering Company can provide manufacturing guidance for processors interested in offering blends of Kynar Flex® PVDF and rubber in applications such as tubing, hose, gaskets, O-rings, films, linings, wire insulation, cable jacketing and molded structural parts. Due to the lower melting point associated with PVDF, compared to other fluoropolymer materials, these blends can be easily processed on standard equipment with minimal or no additional investment.



Kynar Flex® is a registered trademark of Arkema Inc.

Polymer Engineering Company Ltd. offers specialized expertise in the field of polymer technology, including plastic and rubber materials, coatings, paints, adhesives and other unique polymeric applications. [www.polymerengineering.ca](http://www.polymerengineering.ca)

Building on its unique set of expertise in materials science, **Arkema** offers a portfolio of first-class technologies to address ever-growing demand for new and sustainable materials. With the ambition to become in 2024 a pure player in Specialty Materials, the Group is structured into 3 complementary, resilient and highly innovative segments dedicated to Specialty Materials -Adhesive solutions, Advanced Materials, and Coating Solutions- accounting for some 80% of Group sales, and a well-positioned and competitive Intermediates segment. Arkema offers cutting-edge technological solutions to meet the challenges of, *inter alia*, new energies, access to water, recycling, urbanization and mobility, and fosters a permanent dialogue with all its stakeholders. The Group reported sales of €8.7 billion in 2019, and operates in some 55 countries with 20,500 employees worldwide. [www.arkema.com](http://www.arkema.com)

#### **MEDIA CONTACTS - USA**

Mallory Horshaw 215.420.0943  
Vincent Casmirri 610.205.7898  
David Seiler 610.205.7396

[mallory.horshaw@arkema.com](mailto:mallory.horshaw@arkema.com)  
[vincent.casmirri@arkema.com](mailto:vincent.casmirri@arkema.com)  
[david.seiler@arkema.com](mailto:david.seiler@arkema.com)