

FLUOROTECHNOLOGY FOR CHEMICAL AND PHARMACEUTICAL APPLICATIONS

The chemical and pharmaceutical manufacturing processes rely on FluoroTechnology products to provide sterile, corrosion resistant coatings, linings and equipment, and to protect workers from exposure to hazardous chemicals.

Fluoropolymers used in pipes, tanks, valve linings and hoses provide resistance to high heat and chemical insult, improving safety, increasing equipment durability, and reducing maintenance costs. Fluoropolymers used in lubricants provide chemical and thermal stability to allow use in high temperature reactions with aggressive liquids and solvents without product contamination or reaction interference.

Fluorinated polymers applied to garments protect workers from exposure to hazardous chemicals. In addition, fluorinated surfactants used in firefighting foams allow for the quicker extinguishing of solvent fires, resulting in saved lives and fewer injuries and protection of property to reduce asset losses.

The use of FluoroTechnology in the chemical and pharmaceutical industries supports more than 1,000 jobs in the U.S. and more than almost 2,000 jobs in Europe. Globally, FluoroTechnology materials and products specific to the chemical and pharmaceutical industries generate a total of \$1.7 billion in economic output.¹

FluoroCouncil's Commitment to Sustainability

FluoroCouncil and its members are working with regulatory authorities and other stakeholders worldwide to innovate and drive increasingly sustainable FluoroTechnology solutions, including the global transition from long-chain PFAS² to alternatives such as short-chain fluorochemicals. Short-chain fluorochemicals are alternatives to the long-chain PFAS that provide the same valuable properties, but with improved environmental and human health profiles.

All FluoroCouncil companies are charter members of the [2010/2015 PFOA Stewardship Program](#), a global partnership with U.S. Environmental Protection Agency (EPA) based on goals to eliminate perfluorooctanoic acid (PFOA) and related chemicals from facility emissions and product content by the end of 2015. Similar programs are in place with Environment and Health Canada. A significant volume of data has been developed and rigorously evaluated by industry and regulators, supporting the conclusion that the short-chain alternative substances offer equivalent performance with improved environmental and human health profiles.

According to [the U.S. EPA](#), "data indicate that [shorter-chain chemicals] have substantially shorter half-lives in these animals than PFOA and are less toxic than long-chain PFAC chemicals."



¹ Based on preliminary estimates of 2013 data by the American Chemistry Council.

² PFAS = per- and polyfluoroalkyl substances

THE FLUOROCOUNCIL MEMBERS ARE:

Archroma Management LLC, Arkema France, Asahi Glass Co., Ltd., Daikin Industries, Ltd.,
Solvay Specialty Polymers, and The Chemours Company LLC