FLUOROTECHNOLOGY FOR AEROSPACE APPLICATIONS

FluoroTechnology products offer unique, high performance properties to the aerospace industry, enabling the production and operation of modern aircraft. FluoroTechnology enables high and low temperature chemical resistant tubes, hoses and fluid seals; high and low temperature brake and hydraulic fluids used in aircraft control systems and brakes; and ultra-high frequency wire and cable insulation necessary for navigation, fly-by-wire control and aircraft communications.

Properties intrinsic to fluorinated chemicals also allow for unmatched oil/water, stain and soil protection, providing hygienic, longer lasting and lower-maintenance commercial aircraft interiors, which helps keep air travel affordable. Additionally, FluoroTechnology used in firefighting foam enables on-the-ground aircraft fires to be extinguished quickly, the difference between life and death for pilots, passengers and firefighters.

The use of FluoroTechnology in the aerospace industry supports more than 19,000 jobs in the U.S. and more than 36,000 jobs in Europe. Globally, FluoroTechnology materials and products specific to the aerospace industry generate a total of $57.1 billion in economic output.

High-Performance Aerospace Applications

- Brake and Hydraulic Fluids
- Tubing
- Seals
- Wire and Cable Insulation
- On-ground Firefighting Foam Concentrate
- Protection for Commercial Aircraft Interiors

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 PFAS 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 perfluoroctanoic 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