

Fluoropolymer Benefits and Value to American Industry and Manufacturing

Per- and polyfluoroalkyl substances, commonly known as PFAS, are a broad grouping of chemical substances. Fluoropolymers are a distinct member of the PFAS family with unique properties and uses that enable and empower many of the cutting edge and life-enhancing products, technologies, and structures that we use every day and that are all around us.

Fluoropolymers are critical to the industries that produce many of the products we rely on every day.





Cars & Trucks

Cellphones



Aircraft

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Medical Devices



Rechargeable Batteries



Medicine



Protective Equipment







Solar Panels

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Electronics

There are few, if any, alternatives for fluoropolymers in these products and industries, and proposals to restrict or ban them would lead to **increased safety risks, increased maintenance and replacement costs, decreased energy efficiency, and diminished economic competitiveness.**

Please visit the **PERFORMANCE FLUOROPOLYMER PARTNERSHIP** for more information.

Fluoropolymers are large, stable, and inert molecules. They are not soluble in water, and they are too large to pass through cell membranes. They provide:



A wide range of safety and reliability features in industrial processes and manufacturing.

Environmental and public health benefits in health care and energy.



Durability and performance in transportation, electronics, and infrastructure.

Fluoropolymers are an essential component in consumer electronics, air and land transportation, medical technologies, renewable energy, construction, and much more.

The following are just some of the many industries that depend on fluoropolymers to make their products and processes more durable, strong, flexible, long-lasting, and resistant to the elements.



AEROSPACE

Multiple sections of aircraft benefit from temperature- and weather-resistance and wire coating integrity including brakes, communications equipment, outer structure, etc. Insulation on wires and chemically resistant hydraulic hoses made of fluoropolymers ensure the safety of commercial, military, and space flight.



CONSTRUCTION AND INDUSTRY

Structures such as homes, buildings, bridges, and arenas are more durable, strong, and resistant of the weather, climate, and other elements. Fluoropolymers also add fire resistance to construction products and give factories, buildings, bridges, and arenas resistance to the corrosive, life-shortening effects of ultraviolet radiation, water, oil, and dirt.



TELECOMMUNICATIONS

The unique electrical properties of fluoropolymers are essential to achieve high-frequency communications cabling, 5G infrastructure, and circuit boards. Electronics are also more resistant of the elements, particularly water, and transparent screens are more durable and easily used and cleaned.



RENEWABLE ENERGY

Fluoropolymers contribute to the safe and efficient generation and storage of energy from renewable technologies such as solar and wind. Solar panels, rechargeable storage batteries, and wind power generators are also more water- and weather-resistant and produce and store energy more efficiently.



AUTOMOBILE

Lighter-yet-robust materials help to produce cars that are safer and use less fuel, and the integrity of numerous auto parts inside and out is strengthened. For internal combustion engine vehicles, emissions from seals, cables, and hoses made from fluoropolymers are reduced. Fluoropolymers also enable electric vehicle and hydrogen fuel cell technology.



MEDICAL

Fluoropolymers in medical devices such as catheters, guide wires, filters, and pumps reduce the risks of failure, foreign body rejection, cross infections, and clogging. Greater durability and resistance allow these devices to provide a lifetime of service without frequent, invasive replacement.