# THE FLUOROPOLYMER INDUSTRY IN THE UNITED STATES

A SOCIOECONOMIC PERSPECTIVE

#### Fluoropolymers By the Numbers



#### Downstream Jobs Hundreds of thousands of additional jobs are supported by industries that rely on fluoropolymers.

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\$520M Trade Surplus

## \$150M

Research & Development (6.4% OF REVENUE OF INTERVIEWED COMPANIES)

#### Key Sectors Dependent on Fluoropolymers

Electronics	\$550M
Transportation	\$530M
Medical & First Responders	\$100M
Chemical & Industrial Processes	\$330M
Consumer Products	\$200M
Energy	\$140M
Building & Construction	\$90M
TOTAL	\$2.1B

## UNIQUE COMBINATION OF PROPERTIES

Fluoropolymers are polymers with fluorine atoms directly attached to their carbon backbone. Fluoropolymers are materials that possess a unique combination of properties, making them more functional, durable, stable, efficient, versatile and critical to the performance and benefits of the products they enable.

## A WORLD WITHOUT FLUOROPOLYMERS

The combination of properties that fluoropolymers offer sets them apart.

#### Without fluoropolymers...



Maintenance and replacement costs could increase

Production efficiency and economic competititiveness would decrease

# A CLOSER LOOK

SECTOR	PRODUCTION VALUE	DOWNSTREAM EMPLOYMENT	HOW FLUOROPOLYMERS ARE USED	
Electronics				
	\$550M	250,000 SEMICONDUCTOR EMPLOYEES	Critical to the development of semiconductors and printed circuit boards that are found in nearly all electronic devices. Fluoropolymers make electronics including cell phones more affordable, smaller and safer due to heat resistant materials.	
Transportation				
	\$530M	<b>4,000,000</b> AUTOMOTIVE & AUTOMOTIVE PARTS EMPLOYEES	Enhance reliability, safety and communication of automobiles and aircraft. Fluoropolymers are also used to make fuel cells, hoses and gaskets that help your vehicle perform, increase durability and increase fuel efficiency.	
Medical & First Responders				
	\$100M	356,000 MEDICAL DEVICE INDUSTRY EMPLOYEES	to increase the lifetime of implants, reducing the likelihood of infection and invasive surgery. Fluoropolymers also provide excellent performance and long lifetimes in equipment such as catheters, guide wires, filters and pumps.	
Chemical & Industrial Processes			Contribute to corrosion and leaching prevention,	
	\$330M	542,000 CHEMICAL INDUSTRY EMPLOYEES	reduced leaks, lower maintenance and prevention of emissions, particularly in applications involving aggressive chemical fluids. Fluoropolymers are used in coatings, linings, piping, vessels, fluid-handling components, filters, vents and cable coatings.	
Consumer Products				
	\$200M	<b>1,500,000</b> METAL PRODUCT FABRICATOR EMPLOYEES	Used in linings for wind and rain resistant coats that keep outerwear light, durable and breathable, while still protective.	
Energy				
	\$140M	855,000 RENEWABLE ENERGY EMPLOYEES	Critical to casings and surface sealants of renewable energy sources like wind turbines and solar panels that help enable sustainable energy and lower your power bills.	
Building & Cons	struction			
	\$90M	7,200,000 CONSTRUCTION SECTOR EMPLOYEES	Used for coatings on steel and concrete bridges for durability that make your commute safer and lower the cost of public road repairs.	

2018 Socio-economic assessment of the U.S. Fluoropolymer Industry, prepared by the Fluoropolymer Industry with support from AGC, Chemours, Daikin and 3M, and developed by Wood Environment & Infrastructure Solutions UK