



Industrial Safety Fact Sheet

What are fluoropolymers?

- Fluoropolymers are a specialty plastic that possess a unique combination of properties that make them critical to modern life and a wide variety of sectors and industries.
- Fluoropolymers are one specific class of per- and polyfluoroalkyl substances (PFAS), a group of thousands of chemical compounds with varying characteristics, properties, and environmental and safety profiles.
- Importantly, fluoropolymers do not pose a significant risk to human health or the environment when used for their intended purposes.

Fluoropolymers are critical technologies with no viable alternatives.

- Fluoropolymers' unique combination of properties makes them fundamental to the products they enable.
- No alternatives offer the same combination of properties, including:
 - Fire resistance
 - Weather resistance
 - Temperature resistance
 - Chemical resistance
 - Non-wetting properties
 - Non-sticking properties
 - High-performance dielectric properties

Background Points

Uses of Fluoropolymers in Industrial Safety

Fluoropolymers play a significant role in industrial safety. Applications of fluoropolymers include the below:

- **Deep well cable insulation:** Fluoropolymers are used in deep well cable insulation to provide electrical resistance at high temperatures, allowing more space and better crosstalk shielding between conductors, armor-protecting, corrosion inhibitors, and increased cable field life.
- **Chemical tank and container lining:** Fluoropolymers are used to line or form tanks and containers that store and dispense ultrapure and aggressive process fluids.

- **Bulk chemical distribution sensors:** Fluoropolymers are used in high-purity manufacturing, bulk chemical distribution (BCD) delivers critical processing chemicals from large bulk containers to use points.

Benefits of Fluoropolymers in Industrial Safety

- Lower maintenance costs through corrosion prevention.
- Increased lifetime of components.
- Almost universal resistance to chemicals and oils.
- Resistance to low and high operating temperatures.
- Insulation properties which enable downsizing and weight reduction.
- Non-stick and low friction properties.