PFAS 101: A Quick Guide



What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a large group of synthetic chemicals used in various industries due to their unique properties.

PFAS are often referred to as "forever chemicals" because they do not break down easily in the environment.

Did you know there are over 10,000 chemical substances that fall under the broad definition of PFAS (a.k.a. materials containing a Carbon-Fluorine bond)?

Why Do PFAS Matter?

PFAS have raised concerns due to their persistence and potential risks associated with some PFAS, like PFOA and PFOS.

Did you know that to date, only a small subset of PFAS fall into this category?

Regulatory bodies like the U.S. EPA (U.S. Environmental Protection Agency) and ECHA (European Chemicals Agency) have identified certain of these materials and started regulating them.

Regulations are developed on a state-to-state, or country-to-country basis. It is important to be aware of the regulations that may be applicable to your operations.



What Are The Current PFAS Regulations?

- **U.S. EPA:** Set Maximum Contaminant Levels (MCLs) for PFAS compounds in drinking water.
- **ECHA:** Introduced proposals to restrict the use of specific PFAS.
- State Regulations: Some states have their own PFAS restrictions and may vary on a state level, so it is important to stay up to date.

Industry Impact

Did you know PFAS, especially polymeric types like PTFE, play a mission-critical role in airplanes, cellphones, medical devices, and cars?

Without them, these technologies would struggle to meet the high-performance standards.

As regulations evolve, industries are searching for alternatives, though many haven't been developed yet. Supply chain disruptions may also arise if manufacturers decide to exit the markets they serve due to PFAS challenges.

However, not all PFAS have been proven harmful. Staying informed on which specific PFAS may affect your industry can help manufacturers anticipate potential impacts to their business.



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Not All PFAS Are the Same. PFAS ≠ PFAs

When asked about PFAS, it is essential to understand which PFAS is being referred to.

- Generic PFAS (Top of the Pyramid): Broad group of 10,000+ substances which includes both polymer and non-polymer PFAS. This is not specific.
- Non-Polymer PFAS (Middle of the Pyramid): Large category which includes a subset of potentially harmful, heavily regulated chemicals such as PFOA, PFOS, PFNA, and HFPO-DA (most commonly associated with environmental concerns). This is the only category of PFAS with PFAS specific regulations in place.
- Polymer PFAS (Middle of the Pyramid): Smaller category which includes materials such as PTFE. <u>There are no</u> <u>applicable PFAS specific regulations in place</u> but they are still part of the PFAS family, so understanding customer concerns is critical.



Key Takeaways

- ✓ Know what your customers mean when they say PFAS: Clarify which specific PFAS substances are relevant to your customer.
- ✓ It is important to be clear what PFAS situation your customer is experiencing:
 - Are your customers aware of how PFAS regulation could impact them?
 - What regulations or other motivators are driving the inquiry?
 - In which region of the country/world will the materials be used?
- ✓ **Stay Informed:** Keep up to date on evolving regulations and supply chain risks.

Rely On Rogers

As of August 2024, Rogers material meets all regulatory standards for PFAS. In addition, Rogers is committed to staying informed of regulatory changes and proactively assessing opportunities for PFAS alternatives in anticipation of regulatory changes and the possibility of future supply disruptions.

Contact your Rogers Sales Engineer for more information.



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What PFAS is your customer referring to?