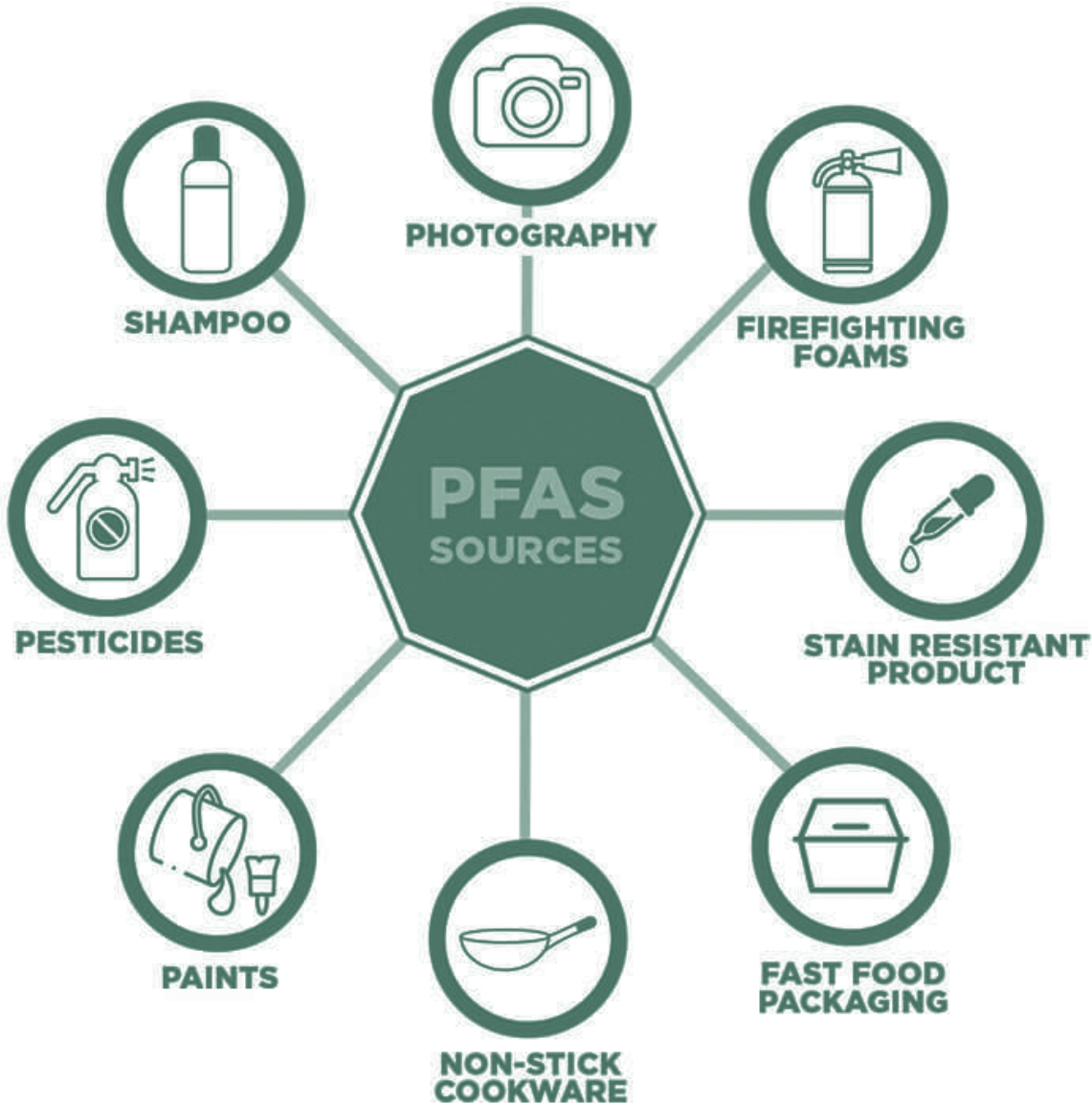




TSCA / PFAS COMPLIANCE

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)



PFAS REGULATED UNDER TSCA

PFAS are Per- and Polyfluoroalkyl Substances, a group of synthetic substances so durable they have earned the nickname **“Forever Chemicals.”** The danger they represent has made them an emerging regulatory target. Here are some basic ways to deal with them.

Image courtesy of www.seacc.org/water-quality/pfas/





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WHAT ARE THEY?

A group of commonly used chemicals since the 1940s have shown up in a number of products offering electrical insulating properties. **Their tight carbon-fluorine bonds help make a number of materials resistant to oil, water, temperature, chemicals and fire.**

So many PFAS substances exist it is hard to study and list them. This document will help you find if materials you are working with, or shipping to us, contain these harmful chemicals.

Today there are over 80,000 sites potentially contaminated by PFAS substances around the world. It is easy to see why more stringent regulations are currently being written.



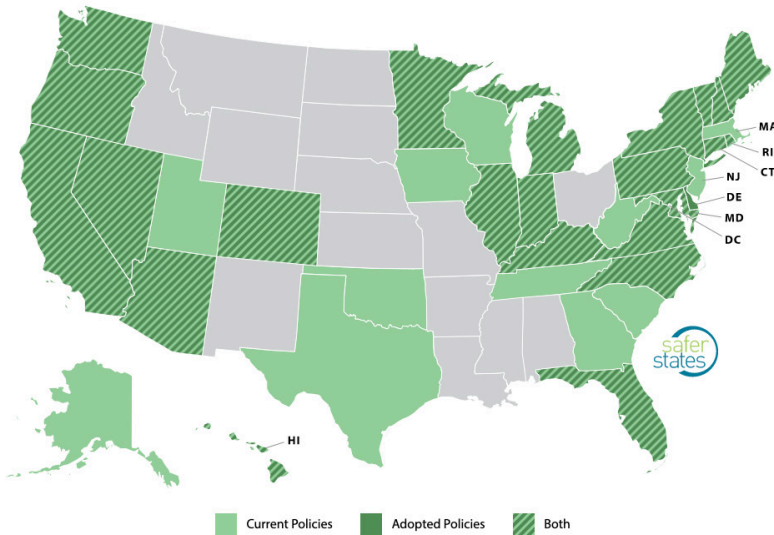


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THE CURRENT REGULATORY STATE

- 46 states have passed or proposed PFAS legislation. Actions include both restrictions and reporting requirements.
- More legislation is now focusing on finished articles.
- Legislation is expected to quickly expand in areas of:
 - **Scope** - Will soon cover all products.
 - **Requirements** - Will move from registration to disclosure to prohibition.
 - **Substances** - Will move from covering specific chemicals to entire family.



206 current policies in 35 states
113 adopted policies in 24 states

Map courtesy of www.saferstates.org/toxic-chemicals/pfas/





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IDENTIFYING PFAS IN MATERIALS

Why we use Supply Chain Query Methods

Of the 3 ways we can identify PFAS in materials used in the manufacture of PEPI® thermal controls, Supply Chain Queries provide the best results.

Safety Data Sheets

PFAS are unlikely to be listed since current regulations don't often require listing.

POOR RESULTS

Chemical Testing

Expensive, time-consuming and incomplete due to limited methods and lower limits on detection levels.

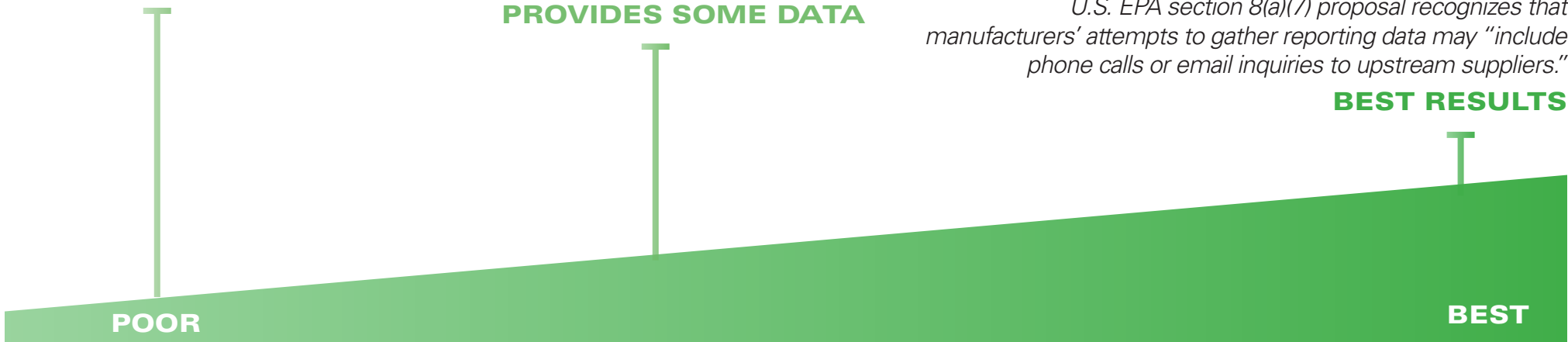
PROVIDES SOME DATA

Supply Chain Query

Currently the universally-accepted approach. Already internationally-recognized for materials compliance regulations (e.g. IEC 63000).

U.S. EPA section 8(a)(7) proposal recognizes that manufacturers' attempts to gather reporting data may "include phone calls or email inquiries to upstream suppliers."

BEST RESULTS



RESULTS





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PFAS REPORTING UNDER TSCA

EPA requires persons that manufacture (including import) or have manufactured these chemical substances **in any year since January 1, 2011** to **electronically report** information regarding PFAS uses, production volumes, disposal, exposures, and hazards.



- Articles containing PFAS are included in scope of reportable chemical substances.
- Small companies, or those using small amounts of PFAS, are not exempted.
- EPA had identified at least 1,346 chemical substances and mixtures that are PFAS.





TSCA / PFAS COMPLIANCE

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IDENTIFYING PFAS BY THEIR PERFORMANCE ATTRIBUTES

PFAS are most often used to add the following characteristics to products:

Fluorinated polymers, elastomers and fluids

- Chemically inert and biocompatible
- Non-stick and slippery (low-friction) surfaces
- High temperature stability
- Electrically insulating and flame retardant
- Often transparent to ultraviolet (UV) light

Fluorinated coatings

- Fluorinated plastic packaging (foods, beverages, solvents, pesticides)
- Water repellent and anti-fogging (hydrophobic)
- Oil and stain repellent (lipophobic or oleophobic)





TSCA / PFAS COMPLIANCE

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

WHERE PFAS ARE COMMONLY USED

Fluorinated Coatings (e.g. PFOA, PFOS)

- Non-wetting (hydrophobic) surface coatings
- On clothing, footwear, carpeting & furniture
- Oil repellent (lipophobic) surface coatings
- On packaging (e.g. for engine parts)
- Evaporation barriers (e.g. plating tanks)
- Antifogging coatings and wipes
- In cosmetics
- In firefighting foams

Fluoropolymers (e.g. PTFE resin, ePTFE membranes)

- Heat resistant electrical insulation
- Heat-resistant coatings
- Non-reactive lubricants (oil, grease)
- Components resistant to fuel, oil, and chemicals
- Oxygen sensors and related 'breathable' membranes
- Garments such as footwear and jackets, that are weather and fuel resistant

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Pepi®

Portage Electric Products, Inc.



TSCA / PFAS COMPLIANCE

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Supplier Resources:

Regulatory Lists:

[EPA Comptox List](#)

[TSCA Section 8\(a\)\(7\) Reporting List: Proposed Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances \(PFAS\).](#)

[OECD \(Organisation for Economic Cooperation and Development\) List: New Comprehensive Global Database of Per- and Polyfluoroalkyl Substances \(PFAS\).](#)

Through our affiliation with Assent, we can offer you the following informational links.

<https://www.assent.com/customer-support/supplier-support>

Email: compliancesupport@assent.com





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Supplier Resources:

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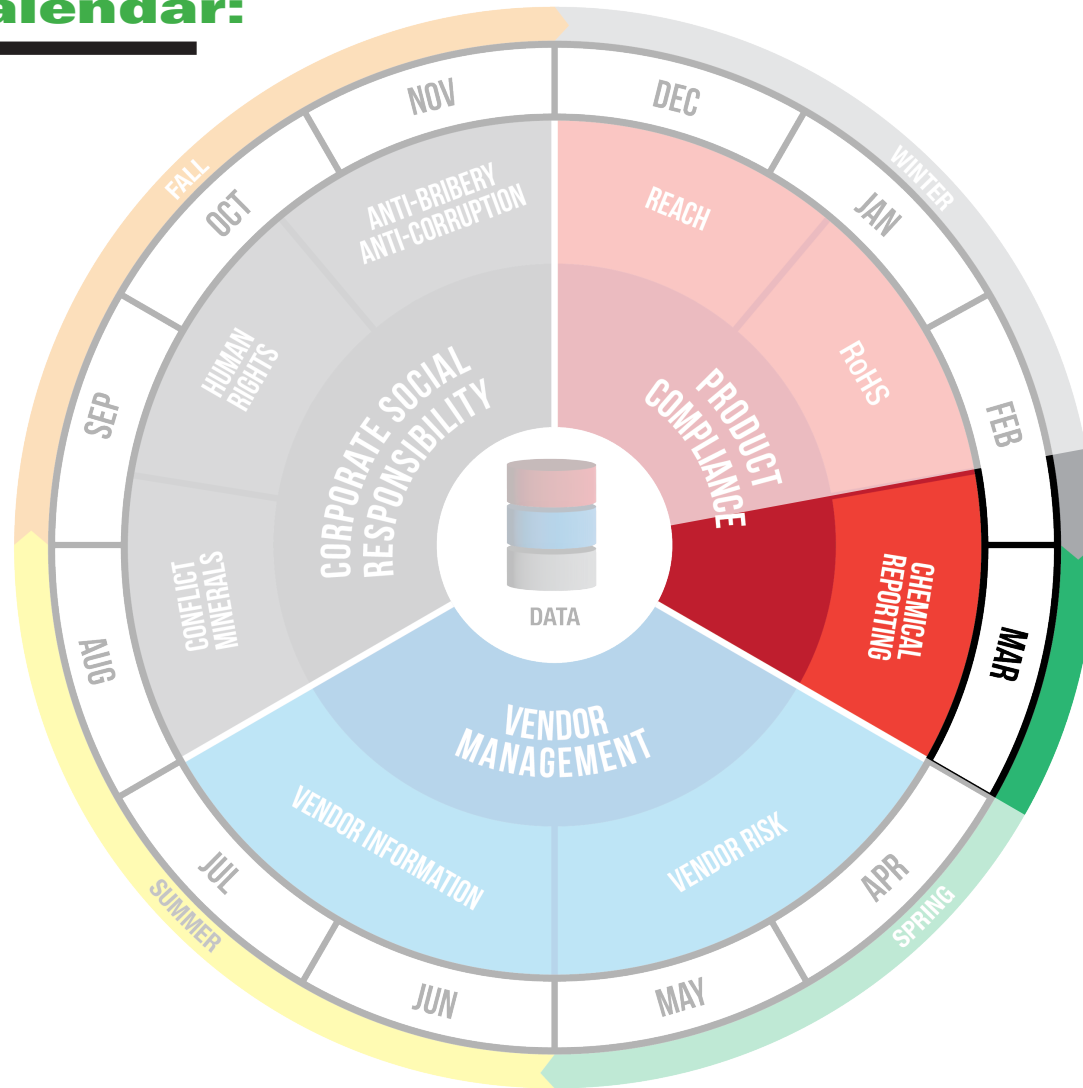




TSCA / PFAS COMPLIANCE

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

Reporting Calendar:



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