



# PFAS Reporting in the United States

### Cally S. Edgren

Senior Director, Regulatory & Sustainability Experts cally.edgren@assent.com April 11, 2024

Note: Global regulations around PFAS chemicals are rapidly evolving. The regulations listed in this presentation do not represent the entirety of regulatory activity or requirements. This presentation is for information only and should not be construed as legal advice.

# Per- & Polyfluoroalkyl Substances (PFAS)

**PFAS,** a family of synthetic chemicals, has been in widespread use since the 1940s.

- Tight carbon-fluorine bonds provide certain properties to materials, including oil-, water-, temperature- chemicaland fire-resistance, and electrical insulating properties
- There are thousands of PFAS chemicals, making it challenging to study and assess the potential health and environmental risks

The same tight chemical bonds responsible for these properties also earn these substances the nickname "**forever chemicals"** due to their resistance to degradation over time.





A great primer on PFAS from Vox:

You probably have "forever chemicals" in your body. Here's what that means.

**Read the Article** 

# Why Use PFAS?

### Performance Attributes Guide PFAS Use in Products

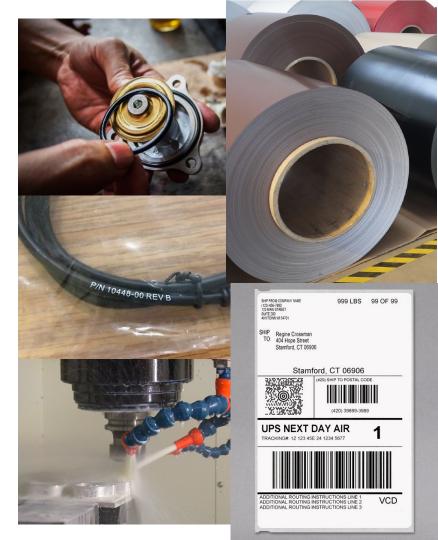


- Water repellent and anti-condensation
- Oil and stain repellent
- Chemically inert and biocompatible
- Non-stick and slippery
- High temperature stability
- Electrically insulating and flame retardant
- Resistant to ultraviolet (UV) light

# Common Uses of PFAS

Electronics - batteries, PCB's, conformal coatings, flame retardants Wires & Cables Hoses & Tubing Lubricants Gaskets, Seals, O-Rings Plastic Parts - mold release agents in resins and dies Coatings - powder, e-coats, lacquer, paints Inks - shipping labels, pad printed parts Tape and Adhesives Plastic packaging - foods, beverages, solvents, pesticides

Most of these materials could be impacted not only for use in products but also as indirect materials in manufacturing operations, including maintenance!

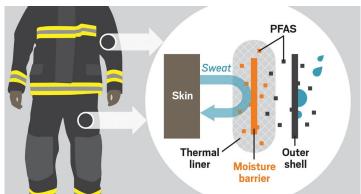


# PFAS in Operations

Widely used in manufacturing processes

Due to their desirable material properties, PFAS are also widely used in manufacturing operations. A few examples:

- Chemical processes like mist suppressant in electroplating operations
- Employee PPE
- Fire-fighting systems
- MRO materials for machine repair and maintenance
  - lubricants, grease, cutting fluids
  - rust preventative coatings
  - floor cleaners and waxes





#### PFAS Releases to the Environment

### US EPA PFAS Roadmap EPA's Commitments to Action 2021–2024



#### Research

Invest in research, development and innovation to **increase understanding of PFAS** and effective interventions



### Restrict

Pursue a comprehensive approach to proactively **prevent** PFAS from entering air, land and water at levels that could impact human health and the environment



### Remediate

Broaden and accelerate the **cleanup** of PFAS contamination to protect human health and ecological systems

https://www.epa.gov/pfas/pfas-strategic-roadmap-epas-commitments-action-2021-2024

In October 2023, the <u>EPA published</u> a long-awaited rule under TSCA section 8(a)(7) which requires reporting and recordkeeping for per- and polyfluoroalkyl substances (PFAS)



- The rule was first published as a draft in June 2021
- The rule was mandated by Congress under the National Defense Authorization Act (NDAA) for FY 2020
- Reporting for most manufacturers will be required between November 12, 2024 and May 8, 2025

**Source:** *EPA. (n.d.).* TSCA Section 8(a)(7) Reporting and Recordkeeping Requirements for PFAS.

<u>Federal Register: Toxic Substances Control Act Reporting and Recordkeeping</u> Reguirements for Perfluoroalkyl and Polyfluoroalkyl Substances.



#### EPA Finalizes Rule to Require Reporting of PFAS Data to Better Protect Communities from Forever Chemicals

September 28, 2023

Contact Information EPA Press Office (press@epa.gov)

WASHINGTON – Today, the U.S. Environmental Protection Agency (EPA) finalized a rule that will provide EPA, its partners, and the public with the largest-ever dataset of per- and polyfluoroalkyl substances (PFAS) manufactured and used in the United States. This rule builds on over two years of progress on the <u>Biden-Harris Administration's action plan to combat PFAS pollution</u> (2), safeguarding public health and advancing environmental justice, and is a key action in <u>EPA's PFAS Strategic Roadmap</u>.

PFAS are a category of manufactured chemicals that have been used in industry and consumer products since the 1940s. PFAS have characteristics that make them useful in a variety of products, including nonstick cookware, waterproof clothing, and firefighting foam, as well as in certain manufacturing processes.

The reporting rule under the Toxic Substances Control Act (TSCA) is a statutory requirement under the FY2020 National Defense Authorization Act (NDAA) that requires all manufacturers (including importers) of PFAS and PFAS-containing articles in any year since 2011 to report information related to chemical identity, uses, volumes made and processed, byproducts, environmental and health effects, worker exposure, and disposal to EPA.

"The data we'll receive from this rule will be a game-changer in advancing our ability to understand and effectively protect people from PFAS," **said Assistant Administrator for the Office of Chemical Safety and Pollution Prevention Michal Freedhoff**. "Today we take another important step under EPA's PFAS Strategic Roadmap to deliver on President Biden's clear direction to finally address this legacy pollution endangering people across America."

In order to effectively research, monitor, and regulate PFAS, EPA is taking action to better understand who is using PFAS, how they are being used, and in what quantities. This rule will produce actionable data that can be used by EPA, as well as state, local, and Tribal governments to craft policies and laws that protect people from dangerous "forever chemicals."

Since EPA proposed this rule in <u>June 2021</u>, the agency has provided multiple opportunities for public comment and stakeholder input, including a Small Business Advocacy Review Panel in <u>April 2022</u> and an Initial Regulatory Flexibility Analysis released for public comment in <u>November 2022</u>.

The final rule expands on the definition of PFAS in the proposed rule to include 41 additional PFAS that were identified as being of

# PFAS Reporting Under TSCA Section 8(a)(7)



The final rule requires submission of PFAS manufacturing and importing data from 2011 forward, including PFAS that are incorporated into imported articles.

- Under the rule, articles containing PFAS, including imported articles containing PFAS (such as articles containing PFAS as part of surface coatings), are included in the scope
- Applies to everyone who has "manufactured" or imported a PFAS in any year between 2011 - 2022
- Manufacturers or importers of PFAS are required to provide detailed data within 18 months (by May 8, 2025)
- Substances in scope of reporting are those that meet a definition provided by the EPA (rather than a fixed substance list)
- Distributors and contract manufacturers are also in scope if they import materials containing PFAS

## No Two Laws Are the Same! Regulators Can't Agree on How to Define PFAS



#### U.S. TSCA Reporting Rule

PFAS is defined as including **at** *least one* of these three structures:

- R-(CF2)-CF(R')R", where both the CF2 and CF moieties are saturated carbons
- R-CF2OCF2-R', where R and R' can either be F, O, or saturated carbons
- CF3C(CF3)R'R", where R' and R" can either be F or saturated carbons



### State of Maine Reporting & Restriction Rule

"Perfluoroalkyl and polyfluoroalkyl substances" or "PFAS" means substances that include any member of the class of fluorinated organic chemicals containing at least **one** fully fluorinated carbon atom.



#### EU REACH Restriction Proposal

Per- and polyfluoroalkyl substances (PFASs) defined as: Any substance that contains at least **one** fully fluorinated methyl (CF3-) or methylene (-CF2-) carbon atom (without any H/Cl/Br/l attached to it).



#### UK Regulatory Management Options Analysis (RMOA)

PFAS are defined as fluorinated substances that contain at least **one** fully fluorinated methyl carbon atom (without any hydrogen, chlorine, bromine or iodine atom attached to it), or **two or more** contiguous perfluorinated methylene groups (–CF2–).

# EPA PFAS Lists - Narrow the Scope to Limit Supplier Fatigue

### TSCA Section 8(a)(7)

EPA estimates that at least 11,409 substances\* meet the **definition** of PFAS in the <u>regulation</u>...

#### HOWEVER

Most of those defined substances are **not** considered "active" in the "known TSCA universe", which includes substances listed on the TSCA Inventory or have been listed with a Low-Volume Exemption (LVE) claim (*i.e. registered for use in commerce in the US*)



#### The total number of impacted substances is likely greater than 1,462 since all substances which meet the definition must be reported, even if not on the Inventory or LVE claim lists

\* Per EPA, this list Includes substances beyond the known TSCA universe to provide as comprehensive a list as possible to potential reporting entities. It is not exhaustive and does not contain polymers or UVCBs which may be covered by the rule

### EPA PFAS Master (aka "CompTox")

All known substances - whether active or not - that are considered as "PFAS" by the EPA. **Not specifically linked to section 8(a)(7)** 

Whether those substances are currently used in commerce is irrelevant - 10,000+ PFAS substances are NOT listed on the TSCA Inventory and they are not known to be used in commerce

**Several state laws** refer to the "EPA CompTox List". The previous "<u>PFAS Master</u>" (12,034 substances) has been retired by the EPA and replaced by 2 other lists:

- PFAS Structure Lists 14735 with "explicit structures"
- PFAS Chemicals Without Explicit Structures 1258

The lists include a large number of substances that don't actually exist in commerce - they are not on the TSCA Inventory nor do they have LVE claims - they are not expected to be found in use in the US.

Therefore the EPA did not include them in their estimate of impacted substances (1,462) for reporting.

 ${\bf BUT}$  - if they meet the definition under section 8(a)(7) and for some reason are being manufactured or imported to the US, then they MUST STILL BE REPORTED under section 8(a)(7)

### Who Is Required to Report?

"Importers of PFAS in articles are considered PFAS manufacturers" - EPA

Anyone who has produced, manufactured, or imported PFAS for a commercial purpose in any year since 2011 is <u>covered by this rule.</u>

This includes **importing** a PFAS into the customs territory of the United States, whether on its own, in a mixture, or incorporated into an article

 This includes coincidental manufacture of PFAS as byproducts or impurities The owner of a product or design that includes PFAS is *not* necessarily the responsible party to report if they are <u>sourcing it within the U.S.</u>

- Simply receiving PFAS from domestic suppliers (including distributors) is <u>not</u> considered "manufacturing PFAS" under this rule
- Distributors and contract manufacturers may be in scope of this reporting rule if they are importing PFAS







# Who DOESN'T Need to Report? Exceptions

There is no *de minimis* threshold exempting small businesses or companies that manufacture or import small amounts.

However, small manufacturers **may** be allowed an additional six months (for a total of 24 months) to submit reports.

- This only applies if they would report exclusively as "article importers" for this rule.
- Manufacturers who meet this definition will be allowed to submit reports through November 10, 2025

### What's NOT exempt from this rule:

- fluoropolymers
- recycled materials
- article importers
- substances that meet the PFAS definition but are not listed on the TSCA Inventory
- PFAS imported / manufactured for non-product purposes



# **TSCA Reporting Details**

### Three reporting forms available

Unlike the proposal, the final rule provides manufacturers and importers with three different reporting options:

- There is a full version of reporting for substances and mixtures
- There is a streamlined reporting option for article importers to provide data
- There is another streamlined option available for R&D substances manufactured below 10 kg

#### Reporting is done for each chemical, for each year - 2011 - 2022

(reporting is NOT completed for each individual product SKU)

Data will need to be entered into the EPA's Central Data Exchange system, the same one that is used for quadriannual CDR reporting **The portal will open in November 2024** 

#### § 705.18 (a) Article importer reporting options

NKRA = Not Known or Reasonably Ascertainable NA = Not Applicable			
Data Requirement	EPA's "No Data" Response		
Company & Plant Site Information			
Chemical Name	NKRA		
Generic Name(s) or Description, if Chemical Name Is CBI, or when a manufacturer knows they have a PFAS but unaware of specific identity	NA		
Chemical ID(s) (CASRN and/or LVE Number)	NKRA		
Trade Name or Common Name	NA		
Molecular Structure (Not required for any Class 1 substance on the Inventory)	NKRA		
Industrial Processing and Use — Type of Process or Use	NKRA NKRA NKRA NKRA		
Industrial Processing and Use — Sector(s)			
Industrial Processing and Use — Function Category			
Consumer and Commercial Use — Product Category			
Consumer and Commercial Use — Function Category	NKRA		
Consumer and Commercial Use — Consumer or Commercial	NKRA		
Consumer and Commercial Use — Used in Products Intended for Children	NKRA		
Consumer and Commercial Use — Maximum Concentration in Any Product	NKRA		
Import Production Volume of Imported Article (In unit of measurement of imported article, see below)	NA		
Unit of Measurement of Import Production Volume (e.g., Quantity of imported articles, lbs., tons)			
Imported but Never Physically at Site	NKRA		

## Not Known or Reasonably Ascertainable

#### "Information must be submitted to the extent the submitter knows or can reasonably ascertain."

"*Known to or reasonably ascertainable by*" means all information in a person's possession or control, plus all information that a reasonable person similarly situated might be expected to possess, control, or know.

*Possession or control* means in possession or control of the submitter, or of any subsidiary, partnership in which the submitter is a general partner, parent company, or any company or partnership which the parent company owns or controls, if the subsidiary, parent company, or other company or partnership is associated with the submitter in the research, development, test marketing, or commercial marketing of the chemical substance in question. (A parent company owns or controls another company if the parent owns or controls 50 percent or more of the other company's voting stock. A parent company owns or controls any partnership in which it is a general partner.) Information is included within this definition if it is:

(1) In files maintained by submitter's employees who are:

(i) Associated with research, development, test marketing, or commercial marketing of the chemical substance in question; and/or

(ii) Reasonably likely to have such data.

(2) Maintained in the files of other agents of the submitter who are associated with research, development, test marketing, or commercial marketing of the chemical substance in question in the course of their employment as such agents.

## Due Diligence Obligations

This standard requires manufacturers to conduct a "reasonable inquiry," which may also require inquiries outside the organization to fill gaps in knowledge. **Such activities may include phone calls or email inquiries to upstream suppliers or downstream users.** 

The final rule specifically addresses:

- Manufacturers with partial data
  - "...this rule is not a product testing requirement" –EPA
- Manufacturers who haven't been able to identify any PFAS in their materials

The EPA encourages manufacturers to **document their activities** to provide evidence of due diligence. Additionally, companies may want to retain documentation of reasons for their conclusion that they were *not* subject to reporting requirements (e.g. supplier declarations that indicate "no PFAS").



## Due Diligence Obligations

While the EPA provides various examples of due diligence in action, they stress that because the standard applies on a case-by case basis, these examples cannot substitute for a complete analysis of a submitter's particular circumstances.

#### Scenario:

Example Company O imports stain-resistant garments. They do not know specifically what chemical is used to impart stain resistance, but they do know that chemicals used to impart stain resistance are often fluorinated chemicals and *could* meet the definition of PFAS.

For more hypothetical scenarios, please refer to the TSCA PFAS Reporting Instructions, Chapter 4

Instructions for Reporting PFAS Under TSCA Section 8(a)(7) October 2023 at section 4.2 - "Reporting Standard"

IF:	THEN:
Example Company O contacts their supplier to determine the name, CASRN, and molecular structure of the stain-resistant chemical. The supplier provides this information or a joint submission is initiated.	Duties <b>Likely</b> Fulfilled
Example Company O did not contact their supplier to obtain information on the stain-resistant chemical.	Duties <b>Not</b> Fulfilled

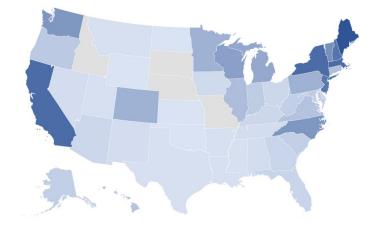
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PFAS Regulations US States

# PFAS in the States: Nearly every U.S. State taking action

# Forty-six states have passed or proposed PFAS legislation

 Actions include restrictions or reporting requirements.



**Source:** Bloomberg Industry Group https://public.flourish.studio/visualisation/12740251/

### Processes & Products Affected

- PFAS legislation increasingly applies to a wider range of products
- Several states, led by Maine and Minnesota, are beginning to legislate PFAS requirements for all products



#### Trends to watch – expansion of:

- **<u>Scope</u>**: From specific products to all products
- <u>Requirements</u>: From registration to disclosure to prohibition
- <u>Substances</u>: From specific chemicals to entire family

# State Reporting Requirements





### Maine

### 38 M.R.S. §1614: Products Containing PFAS

The new law requires manufacturers of **all products** with intentionally added PFAS to report those products to the department beginning **January 2025**. Fee payment is also required

Effective January 2030, any product containing intentionally added PFAS may not be sold in Maine unless the use of PFAS in the product is specifically designated as a "currently unavoidable use"

Note: These dates are different than in the <u>original law</u>, which was <u>amended in June 2023</u>

Data Point	Details Required	
A brief description of the product, including an estimate of the total number of units of the product sold annually in the State or nationally	Product description and Total number of units sold annually (state or nationally)	
The purpose for which PFAS are used in the product, including in any product components	Application / use of PFAS	
The amount of each of the PFAS, identified by its chemical abstracts service registry number or in the absence of this number a description approved by the department, in the product, reported as an exact quantity, or as the amount of total organic fluorine if the amount of each PFAS compound is not known, determined using commercially available analytical methods or based on information provided by a supplier as falling within a range approved for reporting purposes by the department	Amount of PFAS (exact quantity OR as the amount of total organic fluorine) AND CAS number OR a description approved by the department	
The name and address of the manufacturer, and the name, address and phone number of a contact person for the manufacturer	Manufacturer information	

# State Reporting Requirements



### Minnesota

#### 116.943 Products Containing PFAS

Minnesota passed the nation's most comprehensive PFAS restrictions as part of the 2023 omnibus environment, natural resources, climate, and energy finance and policy bill

Product registration is due January 2026 and full restrictions in 2032 unless designated as a "currently unavoidable use". The *prohibitions* do not apply to prosthetic or orthotic devices or to any product that is a medical device or drug regulated by the US FDA, but registration is still required

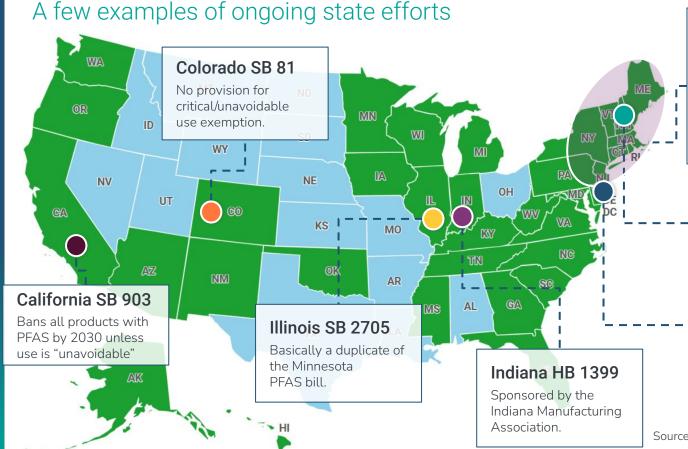
"This will be the strongest PFAS legislation in the nation," said Rep. Sydney Jordan of Minneapolis. "Minnesota invented PFAS. By passing this, Minnesota is going to invent the solution."

Data Point	Details Required
A brief description of the product, including a universal product code (UPC), stock keeping unit (SKU), or other numeric code assigned to the product	Product description and Product Identifier (SKU, catalog number, etc.)
The purpose for which PFAS are used in the product, including in any product components	Application / use of PFAS
The amount of each PFAS, identified by its chemical abstracts service registry number, in the product, reported as an exact quantity determined using commercially available analytical methods or as falling within a range approved for reporting purposes by the commissioner	Amount of PFAS (exact quantity OR as a range) AND CAS number
The name and address of the manufacturer and the name, address, and phone number of a contact person for the manufacturer	Manufacturer information



## PFAS in the States

### <u>SaferStates</u> anticipates that at least 35 states will introduce policies in 2024 around PFAS



#### NEWMOA - Northeast Waste Management Officials Association (8 NE states)

Has proposed model legislation to lower PFAS contamination through reporting requirements and phase-outs

#### New Hampshire HB 1649

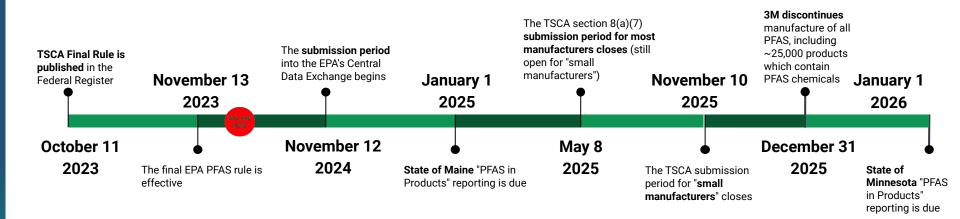
Proposal contains PFAS product labeling requirements.

#### New Jersey AB 1421

Registration and restriction proposal with a \$1,000 fee.

Source: <u>Safer States 2024 Analysis of State Legislation</u> <u>Addressing Toxic Chemicals and Plastics</u>

# Timeline of Major US Milestones



# Assent

# Call to Action

# PFAS poses multidimensional risk that is **unprecedented** for complex manufacturers

# Vast Scope & Pervasiveness

- Impacts all industries
- 1,400–14,000+ substances

#### Complex Regulatory Landscape

- United States federal and state
- Europe
- Canada
- Evolving
  - Different requirements, thresholds, timing, consequences

#### Disruptive PFAS & Part Obsolescence

- Product redesign and recertification
- Supply chain disruption
- Obsolescence risk (e.g., 3M)
- Operation shut-down

#### Products & Processes are at Risk

- Parts
- Finished products
- Process chemicals
- Facility

#### Overwhelming Pressure From All Around

- Regulators
- Customers
- Investors
- Insurers
- Consumers, NGOs
- Competitors

### What Does This Mean for You?

Even if you're exempt from some regulations or if don't make PFAS chemicals yourself, other business drivers from customers, insurers, suppliers, and investors will drive every manufacturer to need to answer the question **"do we use PFAS in our processes or products?"** 

### How to Get Started

- Understanding where you have PFAS in purchased materials, and what they're used for, is urgent
  - These are high-performance substances, and are often used to provide specific capabilities, so look for those features first
  - Don't forget about MRO materials used in your operations, even if they're not part of the final product!



# Identifying PFAS in Materials



### Safety Data Sheets

### Very limited information, extremely manual process

- PFAS are unlikely to be listed on most SDS due to current hazard classifications. They may be "held back" as proprietary
- Most purchased materials will not be provided with an SDS since SDS are not required by law for the majority of "articles"
- Where data IS available on the SDS, extensive manual work is required to collect, analyze, and map the data to regulations

#### **Poor results**



### **Chemical Testing**

### Expensive and time consuming, still incomplete

- Test methods have only been developed for a few specific PFAS chemicals to detectable thresholds
- Lab availability is limited; complex articles are difficult to test
- Lower limits on detection levels are incompatible with regulations that restrict ALL levels of PFAS.
  - The EPA's drinking water proposal set limits for PFOA/PFOS higher than the "health advisory levels" due to the fact that testing methods couldn't detect levels <4 ppt</p>

#### Some data



### Supply Chain Query

#### Universally-accepted approach

- The part level approach is already internationally-recognized for materials compliance regulations (e.g. IEC 63000)
- The U.S. EPA recognizes in the Section 8(a)(7) PFAS Reporting proposal that manufacturers' attempts to gather reporting data may "include phone calls or email inquiries to upstream suppliers"
- Last year the state of Maine amended their PFAS reporting rule to accept supplier-provided data

#### **Best results**

### Take Action!

### Where do you need more data?



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# Resources

TSCA Section 8(a)(7) Supporting & Related Material



### **AEM Resources for TSCA PFAS Reporting:**

Available soon! Check AEM website for updates!



### EPA Resources for TSCA PFAS Reporting:

TSCA 8a7 Reporting Instructions 9-28-23



Partial List of PFAS Substances ID'd by the EPA

TSCA 8a7 Small Entity Compliance Guide

Final Rule Response to Comments

Supporting & Related Materials for TSCA 8a7

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### Common PFAS Uses and Resources

Resources are continually being developed to help manufacturers identify their highest risk areas for PFAS. Some useful links:

#### ChemSec PFAS Guide

An overview of the uses of per- and polyfluoroalkyl substances (PFAS)

Historical and current usage of per- and polyfluoroalkyl substances (PFAS): A literature review

PFAS free - PFAS in our products

PFAS in Building Materials

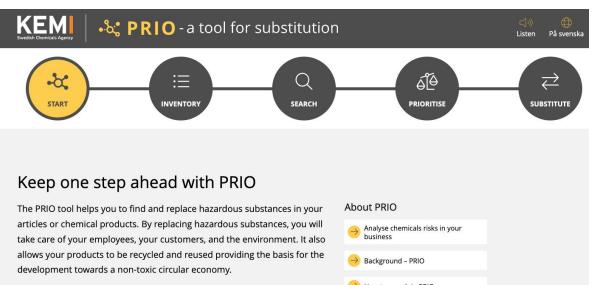
Adhesives Building and construction industry Ceramics and nanostructures synthesis Cleaning products Coatings - especially for water-, oil-, stain-, grease-, electrical- and temperature-resistance Cookware Dry cleaning Electronics industry (including batteries) Electroplating Engine compartment wirings & gauges Etching Explosives, propellants, and ammunition Fabric Fire-fighting foam Fuel system seals & hoses Medical equipment Metal plating and finishing Mining industry

Oil and gas industry Packaging, paper, and cardboard Paints, varnishes and sealants Pesticides and fertilizers Photography and lithography industries Plastics, resins, and rubber Recycling and material recovery Refrigerants Safety equipment Scientific, general use Semiconductor industry Solar panels Textiles Transportation industry

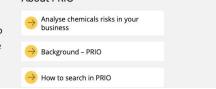
# Identifying PFAS in Applications

Swedish Chemicals Agency PRIO tool can be used to search for chemicals used and support in prioritizing substances for substitution.

### KEMI PRIO Tool



In PRIO you will find both substances that are banned and substances that are still allowed to be



# Identifying PFAS in Applications

Contember PFASGUIDE

Search Investigate Phas

out Concern Regulation Sector

#### **Possible PFAS hotspots**

Based on your selection

ChemSec's "PFAS Guide" provides a starting point for identifying common applications by industry / sector, as well as suggesting possible alternatives for some applications

### <u>PFAS Guide</u>

Use					
See specific sectors for more information	omponents: Conveyor belting, chutes, guiding ra	ils, rollers, funnels and sliding plates	Components: Tank	s, funnels, roller (etc.) linings	Components: Valves and fitments
Components: Filter membranes and sensor covers	Components: Blades of knives and sciss	ors 3D printing Co	omponents: Tubing and pipe	s; Provide a non-stick coatin	ng to conveyor belts
Roller bearings of corrugated paper machinery	Coating of processing tools or moulds	Components: Seals, O-rings, gas	skets Lubricants	Ovenware (including recoating	g services)
Water treatment - membrane for ultrafiltration	Components: Expansion joints Water	treatment - membrane for microfiltr	Manufacture	of pulp, paper and paper products	Components: Springs
Manufucture of metal products - Seals, valves, bearing	ng coating, hose products, tank liners, gaskets an	d packing			
Read more					
21 results			Download E	Excel CO Share link	Q Remember search
Sector	Use/Product		Function	Mater	a
> Industrial use - general applications	See specific sectors	for more information -	8	đ	
<ul> <li>Industrial use - general applications</li> </ul>	Components: Conve guiding rails, rollers, fr plates		Non-stick		
Possible alternatives ⑦		PFAS CAS numbers ⑦	Ad	ditional information	
Ceramic, silicone coatings     Stainless steel     Anodised aluminium		9002-84-0 24937-79-9	-		
Synthetic rubbers and similar ethylene propylene rubber, ne (polyethersulfone)) Alternatives on ChemSec Mar	oprene, PES				

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