

# **The Global Market for Per- and Polyfluoroalkyl Substances (PFAS), PFAS Alternatives and PFAS Treatment 2025-2035**

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## **Abstracts**

Currently, PFAS materials remain crucial in various industries including semiconductors, textiles, food packaging, electronics, and automotive sectors, with applications ranging from water-repellent coatings to high-performance materials for critical technologies. Market dynamics are heavily influenced by regional regulatory frameworks, particularly in Europe and North America, where stringent regulations are accelerating the transition away from traditional PFAS. The semiconductor industry represents a critical use case, where PFAS remains essential for advanced manufacturing processes, though efforts are underway to develop alternatives. Similarly, the automotive and electronics sectors continue to rely on PFAS for specific applications while actively pursuing substitutes.

The PFAS alternatives market is experiencing rapid growth, with innovative solutions emerging across multiple sectors. These include silicon-based materials, hydrocarbon technologies, bio-based alternatives, and novel polymer systems. The textiles and food packaging industries are leading the transition to PFAS-free alternatives, driven by consumer awareness and regulatory requirements. However, technical performance gaps and cost considerations remain significant challenges in many applications. PFAS treatment and remediation technologies represent a growing market segment, driven by the need to address environmental contamination. Current technologies include advanced oxidation processes, membrane filtration, adsorption systems, and emerging destruction technologies. The water treatment sector, in particular, is seeing significant investment in PFAS removal technologies.

Looking toward 2035, the market is expected to undergo substantial changes. Traditional PFAS usage is projected to decline significantly in non-essential applications, while the alternatives market is forecast to experience robust growth.

Critical industries like semiconductors and medical devices may retain specific PFAS applications where alternatives are not yet viable, but with enhanced controls and containment measures.

The treatment technologies market is expected to expand considerably, driven by stricter environmental regulations and growing remediation requirements. Innovation in treatment methods, particularly in destruction technologies and bio-friendly approaches, is likely to accelerate, leading to more cost-effective and efficient solutions. Key challenges for the industry include developing alternatives that match PFAS performance in critical applications, managing transition costs, and ensuring effective treatment solutions. The market outlook varies significantly by region and application, with developed markets leading the transition to alternatives while emerging markets may continue PFAS use in certain applications. Success in this evolving market will depend on technological innovation, regulatory compliance capabilities, and the ability to balance performance requirements with environmental considerations. Companies that can effectively navigate these challenges while developing sustainable solutions are likely to capture significant market opportunities in both alternatives and treatment technologies.

The industry's future will be shaped by continued regulatory evolution, technological advancement, and growing emphasis on sustainable solutions, leading to a transformed market landscape by 2035 characterized by reduced PFAS usage, widespread adoption of alternatives, and advanced treatment capabilities.

The Global Market for Per- and Polyfluoroalkyl Substances (PFAS), PFAS Alternatives and PFAS Treatment 2025-2035 provides an in-depth analysis of the global PFAS sector, including detailed examination of emerging PFAS alternatives and treatment technologies. The study offers strategic insights into market trends, regulatory impacts, and technological developments shaping the industry through 2035. Report contents include:

Comprehensive overview of PFAS chemical structures, properties, and historical development

Detailed classification of PFAS types, including long-chain, short-chain, polymeric and non-polymeric variants

Analysis of unique PFAS properties driving industrial applications

Examination of environmental persistence, bioaccumulation, and health concerns

Global Regulatory Landscape

Current and emerging regulations across major markets including the US, EU, and Asia

Impact assessment of regulatory changes on market dynamics

State-level regulatory developments in the United States

International agreements and collaborative frameworks

Industry-Specific PFAS Usage and Alternatives

Detailed analysis of PFAS applications and alternative solutions across 13 critical sectors:

Semiconductors and electronics

Textiles and clothing

Food packaging

Paints and coatings

Ion exchange membranes

Energy (excluding fuel cells)

Low-loss materials for 5G

Cosmetics

Firefighting foam

Automotive (including electric vehicles)

Medical devices

Green hydrogen

Electronics

PFAS Alternatives Market

Technical assessment of non-fluorinated alternatives:

PFAS-free release agents

Non-fluorinated surfactants and dispersants

Water and oil-repellent materials

Fluorine-free liquid-repellent surfaces

PFAS-free colorless transparent polyimide

PFAS Degradation and Elimination

Current methodologies for PFAS degradation

Bio-friendly remediation approaches:

Phytoremediation and microbial degradation

Enzyme-based solutions

Mycoremediation

Green oxidation methods

PFAS Treatment Market

Detailed market forecasts for PFAS treatment (2025-2035)

Analysis of contamination pathways and global regulatory standards

Comprehensive review of water treatment technologies:

Traditional removal technologies (GAC, ion exchange, membrane filtration)

Emerging removal technologies

Destruction technologies (electrochemical oxidation, SCWO, plasma treatment)

Solid treatment technologies and market projections

Market Analysis and Future Outlook

Current market size and segmentation across regions and industries

Impact of regulations on market dynamics

Emerging trends and opportunities in green chemistry and circular economy

Challenge assessment for PFAS substitution

Short-term (1-3 years), medium-term (3-5 years), and long-term (5-10 years) market projections

Company Profiles. Details of over 500 companies involved in the PFAS, PFAS Alternatives and PFAS Treatment supply chain plus in-depth profiles of 49 companies including 374Water, Aclarity, AquaBlok, Aquagga, Aqua Metrology Systems (AMS), AECOM, Aether Biomachines, Allonia, BioLargo, Cabot Corporation, Calgon Carbon, Claros Technologies, CoreWater Technologies, Cornelsen Umwelttechnologie GmbH, Cyclopure, Desotec, Dmax Plasma, DuPont, ECT2 (Montrose Environmental Group), Element Six, EPOC Enviro, Evoqua Water Technologies, Framergy, General Atomics, Gradient, Greenlab, Haycarb, InEnTec, Inhance Technologies, Jacobi Group, Kuraray, Lanxess AG, Memsys Water Technologies GmbH, Myconaut, Onvector, OXbyEL Technologies, Ovivo, Oxyle AG and more...

Who Should Read This Report:

Chemical manufacturers and suppliers

Environmental engineering firms

Water and waste treatment companies

Regulatory compliance professionals

Sustainability executives

Product development specialists

Research and academic institutions

Environmental consultants

Investment and financial analysts

Industry associations and NGOs

## Contents

### 1 EXECUTIVE SUMMARY

- 1.1 Introduction to PFAS
- 1.2 Definition and Overview of PFAS
  - 1.2.1 Chemical Structure and Properties
  - 1.2.2 Historical Development and Use
- 1.3 Types of PFAS
  - 1.3.1 Non-polymeric PFAS
    - 1.3.1.1 Long-Chain PFAS
    - 1.3.1.2 Short-Chain PFAS
    - 1.3.1.3 Other non-polymeric PFAS
  - 1.3.2 Polymeric PFAS
    - 1.3.2.1 Fluoropolymers (FPs)
    - 1.3.2.2 Side-chain fluorinated polymers:
    - 1.3.2.3 Perfluoropolyethers
- 1.4 Properties and Applications of PFAS
  - 1.4.1 Water and Oil Repellency
  - 1.4.2 Thermal and Chemical Stability
  - 1.4.3 Surfactant Properties
  - 1.4.4 Low Friction
  - 1.4.5 Electrical Insulation
  - 1.4.6 Film-Forming Abilities
  - 1.4.7 Atmospheric Stability
- 1.5 Environmental and Health Concerns
  - 1.5.1 Persistence in the Environment
  - 1.5.2 Bioaccumulation
  - 1.5.3 Toxicity and Health Effects
  - 1.5.4 Environmental Contamination
- 1.6 PFAS Alternatives
- 1.7 Analytical techniques
- 1.8 Manufacturing/handling/import/export
- 1.9 Storage/disposal/treatment/purification
- 1.10 Water quality management
- 1.11 Alternative technologies and supply chains

### 2 GLOBAL REGULATORY LANDSCAPE

- 2.1 Impact of growing PFAS regulation
- 2.2 International Agreements
- 2.3 European Union Regulations
- 2.4 United States Regulations
  - 2.4.1 Federal regulations
  - 2.4.2 State-Level Regulations
- 2.5 Asian Regulations
  - 2.5.1 Japan
    - 2.5.1.1 Chemical Substances Control Law (CSCL)
    - 2.5.1.2 Water Quality Standards
  - 2.5.2 China
    - 2.5.2.1 12. List of New Contaminants Under Priority Control
    - 2.5.2.2 Catalog of Toxic Chemicals Under Severe Restrictions
    - 2.5.2.3 New Pollutants Control Action Plan
  - 2.5.3 Taiwan
    - 2.5.3.1 Toxic and Chemical Substances of Concern Act
  - 2.5.4 Australia and New Zealand
  - 2.5.5 Canada
  - 2.5.6 South Korea
- 2.6 Global Regulatory Trends and Outlook

### **3 INDUSTRY-SPECIFIC PFAS USAGE**

- 3.1 Semiconductors
  - 3.1.1 Importance of PFAS
  - 3.1.2 Front-end processes
    - 3.1.2.1 Lithography
    - 3.1.2.2 Wet etching solutions
    - 3.1.2.3 Chiller coolants for dry etchers
    - 3.1.2.4 Piping and valves
  - 3.1.3 Back-end processes
    - 3.1.3.1 Interconnects and Packaging Materials
    - 3.1.3.2 Molding materials
    - 3.1.3.3 Die attach materials
    - 3.1.3.4 Interlayer film for package substrates
    - 3.1.3.5 Thermal management
  - 3.1.4 Product life cycle and impact of PFAS
    - 3.1.4.1 Manufacturing Stage (Raw Materials)
    - 3.1.4.2 Usage Stage (Semiconductor Factory)



- 3.1.4.3 Disposal Stage
- 3.1.5 Environmental and Human Health Impacts
- 3.1.6 Regulatory Trends Related to Semiconductors
- 3.1.7 Exemptions
- 3.1.8 Future Regulatory Trends
- 3.1.9 Alternatives to PFAS
  - 3.1.9.1 Alkyl Polyglucoside and Polyoxyethylene Surfactants
  - 3.1.9.2 Non-PFAS Etching Solutions
  - 3.1.9.3 PTFE-Free Sliding Materials
  - 3.1.9.4 Metal oxide-based materials
  - 3.1.9.5 Fluoropolymer Alternatives
  - 3.1.9.6 Silicone-based Materials
  - 3.1.9.7 Hydrocarbon-based Surfactants
  - 3.1.9.8 Carbon Nanotubes and Graphene
  - 3.1.9.9 Engineered Polymers
  - 3.1.9.10 Supercritical CO<sub>2</sub> Technology
  - 3.1.9.11 Plasma Technologies
  - 3.1.9.12 Sol-Gel Materials
  - 3.1.9.13 Biodegradable Polymers
- 3.2 Textiles and Clothing
  - 3.2.1 Overview
  - 3.2.2 PFAS in Water-Repellent Materials
  - 3.2.3 Stain-Resistant Treatments
  - 3.2.4 Regulatory Impact on Water-Repellent Clothing
  - 3.2.5 Industry Initiatives and Commitments
  - 3.2.6 Alternatives to PFAS
    - 3.2.6.1 Enhanced surface treatments
    - 3.2.6.2 Non-fluorinated treatments
    - 3.2.6.3 Biomimetic approaches
    - 3.2.6.4 Nano-structured surfaces
    - 3.2.6.5 Wax-based additives
    - 3.2.6.6 Plasma treatments
    - 3.2.6.7 Sol-gel coatings
    - 3.2.6.8 Superhydrophobic coatings
    - 3.2.6.9 Biodegradable Polymer Coatings
    - 3.2.6.10 Graphene-based Coatings
    - 3.2.6.11 Enzyme-based Treatments
    - 3.2.6.12 Companies
- 3.3 Food Packaging

- 3.3.1 Sustainable packaging
  - 3.3.1.1 PFAS in Grease-Resistant Packaging
  - 3.3.1.2 Other applications
  - 3.3.1.3 Regulatory Trends in Food Contact Materials
- 3.3.2 Alternatives to PFAS
  - 3.3.2.1 Biobased materials
    - 3.3.2.1.1 Polylactic Acid (PLA)
    - 3.3.2.1.2 Polyhydroxyalkanoates (PHAs)
    - 3.3.2.1.3 Cellulose-based materials
      - 3.3.2.1.3.1 Nano-fibrillated cellulose (NFC)
      - 3.3.2.1.3.2 Bacterial Nanocellulose (BNC)
    - 3.3.2.1.4 Silicon-based Alternatives
    - 3.3.2.1.5 Natural Waxes and Resins
    - 3.3.2.1.6 Engineered Paper and Board
    - 3.3.2.1.7 Nanocomposites
    - 3.3.2.1.8 Plasma Treatments
    - 3.3.2.1.9 Biodegradable Polymer Blends
    - 3.3.2.1.10 Chemically Modified Natural Polymers
    - 3.3.2.1.11 Molded Fiber
  - 3.3.2.2 PFAS-free coatings for food packaging
    - 3.3.2.2.1 Silicone-based Coatings:
    - 3.3.2.2.2 Bio-based Barrier Coatings
    - 3.3.2.2.3 Nanocellulose Coatings
    - 3.3.2.2.4 Superhydrophobic and Omniphobic Coatings
    - 3.3.2.2.5 Clay-based Nanocomposite Coatings
    - 3.3.2.2.6 Coated Papers
  - 3.3.2.3 Companies
- 3.4 Paints and Coatings
  - 3.4.1 Overview
  - 3.4.2 Applications
  - 3.4.3 Alternatives to PFAS
    - 3.4.3.1 Silicon-Based Alternatives:
    - 3.4.3.2 Hydrocarbon-Based Alternatives:
    - 3.4.3.3 Nanomaterials
    - 3.4.3.4 Plasma-Based Surface Treatments
    - 3.4.3.5 Inorganic Alternatives
    - 3.4.3.6 Bio-based Polymers:
    - 3.4.3.7 Dendritic Polymers
    - 3.4.3.8 Zwitterionic Polymers

- 3.4.3.9 Graphene-based Coatings
- 3.4.3.10 Hybrid Organic-Inorganic Coatings
- 3.4.3.11 Companies
- 3.5 Ion Exchange membranes
  - 3.5.1 Overview
    - 3.5.1.1 PFAS in Ion Exchange Membranes
  - 3.5.2 Proton Exchange Membranes
    - 3.5.2.1 Overview
    - 3.5.2.2 Proton Exchange Membrane Electrolyzers (PEMELs)
    - 3.5.2.3 Membrane Degradation
    - 3.5.2.4 Nafion
    - 3.5.2.5 Membrane electrode assembly (MEA)
  - 3.5.3 Manufacturing PFSA Membranes
  - 3.5.4 Enhancing PFSA Membranes
  - 3.5.5 Commercial PFSA membranes
  - 3.5.6 Catalyst Coated Membranes
    - 3.5.6.1 Alternatives to PFAS
  - 3.5.7 Membranes in Redox Flow Batteries
    - 3.5.7.1 Alternative Materials for RFB Membranes
  - 3.5.8 Alternatives to PFAS
    - 3.5.8.1 Alternative Polymer Materials
    - 3.5.8.2 Anion Exchange Membrane Technology (AEM) fuel cells
    - 3.5.8.3 Nanocellulose
    - 3.5.8.4 Boron-containing membranes
    - 3.5.8.5 Hydrocarbon-based membranes
    - 3.5.8.6 Metal-Organic Frameworks (MOFs)
      - 3.5.8.6.1 MOF Composite Membranes
    - 3.5.8.7 Graphene
    - 3.5.8.8 Companies
- 3.6 Energy (excluding fuel cells)
  - 3.6.1 Overview
  - 3.6.2 Solar Panels
  - 3.6.3 Wind Turbines
    - 3.6.3.1 Blade Coatings
    - 3.6.3.2 Lubricants and Greases
    - 3.6.3.3 Electrical and Electronic Components
    - 3.6.3.4 Seals and Gaskets
  - 3.6.4 Lithium-Ion Batteries
    - 3.6.4.1 Electrode Binders

- 3.6.4.2 Electrolyte Additives
- 3.6.4.3 Separator Coatings
- 3.6.4.4 Current Collector Coatings
- 3.6.4.5 Gaskets and Seals
- 3.6.4.6 Fluorinated Solvents in Electrode Manufacturing
- 3.6.4.7 Surface Treatments
- 3.6.5 Alternatives to PFAS
  - 3.6.5.1 Solar
    - 3.6.5.1.1 Ethylene Vinyl Acetate (EVA) Encapsulants
    - 3.6.5.1.2 Polyolefin Encapsulants
    - 3.6.5.1.3 Glass-Glass Module Design
    - 3.6.5.1.4 Bio-based Backsheets
  - 3.6.5.2 Wind Turbines
    - 3.6.5.2.1 Silicone-Based Coatings
    - 3.6.5.2.2 Nanocoatings
    - 3.6.5.2.3 Thermal De-icing Systems
    - 3.6.5.2.4 Polyurethane-Based Coatings
  - 3.6.5.3 Lithium-Ion Batteries
    - 3.6.5.3.1 Water-Soluble Binders
    - 3.6.5.3.2 Polyacrylic Acid (PAA) Based Binders
    - 3.6.5.3.3 Alginate-Based Binders
    - 3.6.5.3.4 Ionic Liquid Electrolytes
  - 3.6.5.4 Companies
- 3.7 Low-loss materials for 5G
  - 3.7.1 Overview
    - 3.7.1.1 Organic PCB materials for 5G
  - 3.7.2 PTFE in 5G
    - 3.7.2.1 Properties
    - 3.7.2.2 PTFE-Based Laminates
    - 3.7.2.3 Regulations
    - 3.7.2.4 Commercial low-loss
  - 3.7.3 Alternatives to PFAS
    - 3.7.3.1 Liquid crystal polymers (LCP)
    - 3.7.3.2 Poly(p-phenylene ether) (PPE)
    - 3.7.3.3 Poly(p-phenylene oxide) (PPO)
    - 3.7.3.4 Hydrocarbon-based laminates
    - 3.7.3.5 Low Temperature Co-fired Ceramics (LTCC)
    - 3.7.3.6 Glass Substrates
- 3.8 Cosmetics

- 3.8.1 Overview
- 3.8.2 Use in cosmetics
- 3.8.3 Alternatives to PFAS
  - 3.8.3.1 Silicone-based Polymers
  - 3.8.3.2 Plant-based Waxes and Oils
  - 3.8.3.3 Naturally Derived Polymers
  - 3.8.3.4 Silica-based Materials
  - 3.8.3.5 Companies Developing PFAS Alternatives in Cosmetics
- 3.9 Firefighting Foam
  - 3.9.1 Overview
  - 3.9.2 Aqueous Film-Forming Foam (AFFF)
  - 3.9.3 Environmental Contamination from AFFF Use
  - 3.9.4 Regulatory Pressures and Phase-Out Initiatives
  - 3.9.5 Alternatives to PFAS
    - 3.9.5.1 Fluorine-Free Foams (F3)
    - 3.9.5.2 Siloxane-Based Foams
    - 3.9.5.3 Protein-Based Foams
    - 3.9.5.4 Synthetic Detergent Foams (Syndet)
    - 3.9.5.5 Compressed Air Foam Systems (CAFS)
- 3.10 Automotive
  - 3.10.1 Overview
  - 3.10.2 PFAS in Lubricants and Hydraulic Fluids
  - 3.10.3 Use in Fuel Systems and Engine Components
  - 3.10.4 Electric Vehicle
    - 3.10.4.1 PFAS in Electric Vehicles
    - 3.10.4.2 High-Voltage Cables
    - 3.10.4.3 Refrigerants
      - 3.10.4.3.1 Coolant Fluids in EVs
      - 3.10.4.3.2 Refrigerants for EVs
      - 3.10.4.3.3 Regulations
      - 3.10.4.3.4 PFAS-free Refrigerants
    - 3.10.4.4 Immersion Cooling for Li-ion Batteries
      - 3.10.4.4.1 Overview
      - 3.10.4.4.2 Single-phase Cooling
      - 3.10.4.4.3 Two-phase Cooling
      - 3.10.4.4.4 Companies
      - 3.10.4.4.5 PFAS-based Coolants in Immersion Cooling for EVs
  - 3.10.5 Alternatives to PFAS
    - 3.10.5.1 Lubricants and Greases

- 3.10.5.2 Fuel System Components
- 3.10.5.3 Surface Treatments and Coatings
- 3.10.5.4 Gaskets and Seals
- 3.10.5.5 Hydraulic Fluids
- 3.10.5.6 Electrical and Electronic Components
- 3.10.5.7 Paint and Coatings
- 3.10.5.8 Windshield and Glass Treatments
- 3.11 Electronics
  - 3.11.1 Overview
  - 3.11.2 PFAS in Printed Circuit Boards
  - 3.11.3 Cable and Wire Insulation
  - 3.11.4 Regulatory Challenges for Electronics Manufacturers
  - 3.11.5 Alternatives to PFAS
    - 3.11.5.1 Wires and Cables
    - 3.11.5.2 Coating
    - 3.11.5.3 Electronic Components
    - 3.11.5.4 Sealing and Lubricants
    - 3.11.5.5 Cleaning
    - 3.11.5.6 Companies
- 3.12 Medical Devices
  - 3.12.1 Overview
  - 3.12.2 PFAS in Implantable Devices
  - 3.12.3 Diagnostic Equipment Applications
  - 3.12.4 Balancing Safety and Performance in Regulations
  - 3.12.5 Alternatives to PFAS
- 3.13 Green hydrogen
  - 3.13.1 Electrolyzers
  - 3.13.2 Alternatives to PFAS
  - 3.13.3 Economic implications

## **4 PFAS ALTERNATIVES**

- 4.1 PFAS-Free Release Agents
  - 4.1.1 Silicone-Based Alternatives
  - 4.1.2 Hydrocarbon-Based Solutions
  - 4.1.3 Performance Comparisons
- 4.2 Non-Fluorinated Surfactants and Dispersants
  - 4.2.1 Bio-Based Surfactants
  - 4.2.2 Silicon-Based Surfactants

- 4.2.3 Hydrocarbon-Based Surfactants
- 4.3 PFAS-Free Water and Oil-Repellent Materials
  - 4.3.1 Dendrimers and Hyperbranched Polymers
  - 4.3.2 PFA-Free Durable Water Repellent (DWR) Coatings
  - 4.3.3 Silicone-Based Repellents
  - 4.3.4 Nano-Structured Surfaces
- 4.4 Fluorine-Free Liquid-Repellent Surfaces
  - 4.4.1 Superhydrophobic Coatings
  - 4.4.2 Omniphobic Surfaces
  - 4.4.3 Slippery Liquid-Infused Porous Surfaces (SLIPS)
- 4.5 PFAS-Free Colorless Transparent Polyimide
  - 4.5.1 Novel Polymer Structures
  - 4.5.2 Applications in Flexible Electronics

## **5 PFAS DEGRADATION AND ELIMINATION**

- 5.1 Current methods for PFAS degradation and elimination
- 5.2 Bio-friendly methods
  - 5.2.1 Phytoremediation
  - 5.2.2 Microbial Degradation
  - 5.2.3 Enzyme-Based Degradation
  - 5.2.4 Mycoremediation
  - 5.2.5 Biochar Adsorption
  - 5.2.6 Green Oxidation Methods
  - 5.2.7 Bio-based Adsorbents
  - 5.2.8 Algae-Based Systems
- 5.3 Companies

## **6 PFAS TREATMENT**

- 6.1 Introduction
- 6.2 Pathways for PFAS environmental contamination
- 6.3 Regulations
  - 6.3.1 USA
  - 6.3.2 EU
  - 6.3.3 Rest of the World
- 6.4 PFAS water treatment
  - 6.4.1 Introduction
  - 6.4.2 Market Forecast 2025-2035



### 6.4.3 Applications

#### 6.4.3.1 Drinking water

#### 6.4.3.2 Aqueous film forming foam (AFFF)

#### 6.4.3.3 Landfill leachate

#### 6.4.3.4 Municipal wastewater treatment

#### 6.4.3.5 Industrial process and wastewater

#### 6.4.3.6 Sites with heavy PFAS contamination

#### 6.4.3.7 Point-of-use (POU) and point-of-entry (POE) filters and systems

### 6.4.4 PFAS treatment approaches

### 6.4.5 Traditional removal technologies

#### 6.4.5.1 Adsorption: granular activated carbon (GAC)

##### 6.4.5.1.1 Sources

##### 6.4.5.1.2 Short-chain PFAS compounds

##### 6.4.5.1.3 Reactivation

##### 6.4.5.1.4 PAC systems

#### 6.4.5.2 Adsorption: ion exchange resins (IER)

##### 6.4.5.2.1 Pre-treatment

##### 6.4.5.2.2 Resins

#### 6.4.5.3 Membrane filtration-reverse osmosis and nanofiltration

### 6.4.6 Emerging removal technologies

#### 6.4.6.1 Foam fractionation and ozofractionation

##### 6.4.6.1.1 Polymeric sorbents

##### 6.4.6.1.2 Mineral-based sorbents

##### 6.4.6.1.3 Flocculation/coagulation

##### 6.4.6.1.4 Electrostatic coagulation/concentration

#### 6.4.6.2 Companies

### 6.4.7 Destruction technologies

#### 6.4.7.1 PFAS waste management

#### 6.4.7.2 Landfilling of PFAS-containing waste

#### 6.4.7.3 Thermal treatment

#### 6.4.7.4 Liquid-phase PFAS destruction

#### 6.4.7.5 Electrochemical oxidation

#### 6.4.7.6 Supercritical water oxidation (SCWO)

#### 6.4.7.7 Hydrothermal alkaline treatment (HALT)

#### 6.4.7.8 Plasma treatment

#### 6.4.7.9 Photocatalysis

#### 6.4.7.10 Sonochemical oxidation

#### 6.4.7.11 Challenges

#### 6.4.7.12 Companies



## 6.5 PFAS Solids Treatment

### 6.5.1 Market Forecast 2025-2035

### 6.5.2 PFAS migration

### 6.5.3 Soil washing (or soil scrubbing)

### 6.5.4 Soil flushing

### 6.5.5 Thermal desorption

### 6.5.6 Phytoremediation

### 6.5.7 In-situ immobilization

### 6.5.8 Pyrolysis and gasification

### 6.5.9 Plasma

### 6.5.10 Supercritical water oxidation (SCWO)

## 6.6 Companies

# 7 GLOBAL MARKET ANALYSIS AND FUTURE OUTLOOK

## 7.1 Current Market Size and Segmentation

### 7.1.1 Global PFAS Market Overview

### 7.1.2 Regional Market Analysis

#### 7.1.2.1 North America

#### 7.1.2.2 Europe

#### 7.1.2.3 Asia-Pacific

#### 7.1.2.4 Latin America

#### 7.1.2.5 Middle East and Africa

### 7.1.3 Market Segmentation by Industry

#### 7.1.3.1 Textiles and Apparel

#### 7.1.3.2 Food Packaging

#### 7.1.3.3 Firefighting Foams

#### 7.1.3.4 Electronics & semiconductors

#### 7.1.3.5 Automotive

#### 7.1.3.6 Aerospace

#### 7.1.3.7 Construction

#### 7.1.3.8 Others

### 7.1.4 Global PFAS Treatment Market Overview

#### 7.1.4.1 Regional PFAS Treatment Market Analysis

##### 7.1.4.1.1 North America

##### 7.1.4.1.2 Europe

##### 7.1.4.1.3 Asia-Pacific

##### 7.1.4.1.4 Latin America

##### 7.1.4.1.5 Middle East and Africa

- 7.2 Impact of Regulations on Market Dynamics
  - 7.2.1 Shift from Long-Chain to Short-Chain PFAS
  - 7.2.2 Growth in PFAS-Free Alternatives Market
  - 7.2.3 Regional Market Shifts Due to Regulatory Differences
- 7.3 Emerging Trends and Opportunities
  - 7.3.1 Green Chemistry Innovations
  - 7.3.2 Circular Economy Approaches
  - 7.3.3 Digital Technologies for PFAS Management
- 7.4 Challenges and Barriers to PFAS Substitution
  - 7.4.1 Technical Performance Gaps
  - 7.4.2 Cost Considerations
  - 7.4.3 Regulatory Uncertainty
- 7.5 Future Market Projections
  - 7.5.1 Short-Term Outlook (1-3 Years)
  - 7.5.2 Medium-Term Projections (3-5 Years)
  - 7.5.3 Long-Term Scenarios (5-10 Years)

## **8 COMPANY PROFILES 316 (49 COMPANY PROFILES)**

## **9 RESEARCH METHODOLOGY**

## **10 REFERENCES**

## List Of Tables

### LIST OF TABLES

- Table 1. Established applications of PFAS.
- Table 2. PFAS chemicals segmented by non-polymers vs polymers.
- Table 3. Non-polymeric PFAS.
- Table 4. Chemical structure and physiochemical properties of various perfluorinated surfactants.
- Table 5. Examples of long-chain PFAS-Applications, Regulatory Status and Environmental and Health Effects.
- Table 6. Examples of short-chain PFAS.
- Table 7. Other non-polymeric PFAS.
- Table 8. Examples of fluoropolymers.
- Table 9. Examples of side-chain fluorinated polymers.
- Table 10. Applications of PFAs.
- Table 11. PFAS surfactant properties.
- Table 12. 12. List of PFAS alternatives.
- Table 13. Common PFAS and their regulation.
- Table 14. International PFAS regulations.
- Table 15. European Union Regulations.
- Table 16. United States Regulations.
- Table 17. PFAS Regulations in Asia-Pacific Countries.
- Table 18. Identified uses of PFAS in semiconductors.
- Table 19. Alternatives to PFAS in Semiconductors.
- Table 20. Key properties of PFAS in water-repellent materials.
- Table 21. Initiatives by outdoor clothing companies to phase out PFCs.
- Table 22. Comparative analysis of Alternatives to PFAS for textiles.
- Table 23. Companies developing PFAS alternatives for textiles.
- Table 24. Applications of PFAS in Food Packaging.
- Table 25. Regulation related to PFAS in food contact materials.
- Table 26. Applications of cellulose nanofibers (CNF).
- Table 27. Companies developing PFAS alternatives for food packaging.
- Table 28. Applications and purpose of PFAS in paints and coatings.
- Table 29. Companies developing PFAS alternatives for paints and coatings.
- Table 30. Applications of Ion Exchange Membranes.
- Table 31. Key aspects of PEMELs.
- Table 32. Membrane Degradation Processes Overview.
- Table 33. PFSA Membranes & Key Players.

Table 34. Competing Membrane Materials.
Table 35. Comparative analysis of membrane properties.
Table 36. Processes for manufacturing of perfluorosulfonic acid (PFSA) membranes.
Table 37. PFSA Resin Suppliers.
Table 38. CCM Production Technologies.
Table 39. Comparison of Coating Processes.
Table 40. Alternatives to PFAS in catalyst coated membranes.
Table 41. Key Properties and Considerations for RFB Membranes.
Table 42. PFSA Membrane Manufacturers for RFBs.
Table 43. Alternative Materials for RFB Membranes
Table 44. Alternative Polymer Materials for Ion Exchange Membranes.
Table 45. Hydrocarbon Membranes for PEM Fuel Cells.
Table 46. Companies developing PFA alternatives for fuel cell membranes.
Table 47. Identified uses of PFASs in the energy sector.
Table 48. Alternatives to PFAS in Energy by Market (Excluding Fuel Cells).
Table 49. Anti-icing and de-icing nanocoatings product and application developers.
Table 50. Companies developing alternatives to PFAS in energy (excluding fuel cells).
Table 51. Commercial low-loss organic laminates-key properties at 10 GHz.
Table 52. Key Properties of PTFE to Consider for 5G Applications.
Table 53. Applications of PTFE in 5G in a table
Table 54. Challenges in PTFE-based laminates in 5G.
Table 55. Key regulations affecting PFAS use in low-loss materials.
Table 56. Commercial low-loss materials suitable for 5G applications.
Table 57. Key low-loss materials suppliers.
Table 58. Alternatives to PFAS for low-loss applications in 5G
Table 59. Benchmarking LTCC materials suitable for 5G applications.
Table 60. Benchmarking of various glass substrates suitable for 5G applications.
Table 61. Applications of PFAS in cosmetics.
Table 62. Alternatives to PFAS for various functions in cosmetics.
Table 63. Companies developing PFAS alternatives in cosmetics.
Table 64. Applications of PFAS in Automotive Industry.
Table 65. Application of PFAS in Electric Vehicles.
Table 66. Suppliers of PFAS-free Coolants and Refrigerants for EVs.
Table 67. Immersion Fluids for EVs
Table 68. Immersion Cooling Fluids Requirements.
Table 69. Single-phase vs two-phase cooling.
Table 70. Companies producing Immersion Fluids for EVs.
Table 71. Alternatives to PFAS in the automotive sector.
Table 72. Use of PFAS in the electronics sector.

Table 73. Companies developing alternatives to PFAS in electronics & semiconductors.

Table 74. Applications of PFAS in Medical Devices.

Table 75. Alternatives to PFAS in medical devices.

Table 76. Readiness level of PFAS alternatives.

Table 77. Comparing PFAS-free alternatives to traditional PFAS-containing release agents.

Table 78. Novel PFAS-free CTPI structures.

Table 79. Applications of PFAS-free CTPIs in flexible electronics.

Table 80. Current methods for PFAS elimination .

Table 81. Companies developing processes for PFA degradation and elimination.

Table 82. Total PFAS Treatment Market Forecast by Segment (2025-2035).

Table 83. PFAS Treatment Market Share Evolution.

Table 84. Pathways for PFAS environmental contamination.

Table 85. Global PFAS Drinking Water Limits

Table 86. USA PFAS Regulations.

Table 87. EU PFAS Regulations

Table 88. Global PFAS Regulations.

Table 89. PFAS drinking water treatment market forecast 2025-2035

Table 90. Applications requiring PFAS water treatment.

Table 91. Point-of-Use (POU) and Point-of-Entry (POE) Systems.

Table 92. PFAS treatment approaches.

Table 93. Typical Flow Rates for Different Facilities.

Table 94. In-Situ vs Ex-Situ Treatment Comparison

Table 95. Technology Readiness Level (TRL) for PFAS Removal.

Table 96. Removal technologies for PFAS in water.

Table 97. Suppliers of GAC media for PFAS removal applications.

Table 98. Commercially Available PFAS-Selective Resins.

Table 99. Estimated Treatment Costs by Method.

Table 100. Comparison of technologies for PFAS removal.

Table 101. Emerging removal technologies for PFAS in water.

Table 102. Companies in emerging PFAS removal technologies.

Table 103. PFAS Destruction Technologies.

Table 104. Technology Readiness Level (TRL) for PFAS Destruction Technologies.

Table 105. Thermal Treatment Types.

Table 106. Liquid-Phase Technology Segmentation.

Table 107. PFAS Destruction Technologies Challenges.

Table 108. Companies developing PFAS Destruction Technologies.

Table 109. PFAS Solids Treatment Market Forecast 2025-2035.

Table 110. Treatment Methods for PFAS-Contaminated Solids.

Table 111. Companies developing processes for PFAS water and solid treatment.

Table 112. Global PFAS Market Projection (2023-2035), Billions USD.

Table 113. Regional PFAS Market Projection (2023-2035), Billions USD.

Table 114. PFAS Market Segmentation by Industry (2023-2035), Billions USD.

Table 115. PFAS treatment market by region, North America.

Table 116. PFAS treatment market by region, Europe.

Table 117. PFAS treatment market by region, Asia-Pacific.

Table 118. PFAS treatment market by region, Latin America

Table 119. PFAS treatment market by region Middle East and Africa

Table 120. Long-Chain PFAS and Short-Chain PFAS Market Share

Table 121. PFAS-Free Alternatives Market Size from 2020 to 2035, (Billions USD).

Table 122. Regional Market Data (2023) for PFAS and trends.

Table 123. Market Opportunities for PFAS alternatives.

Table 124. Circular Economy Initiatives and Potential Impact.

Table 125. Digital Technology Applications and Market Potential.

Table 126. Performance Comparison Table.

Table 127. Cost Comparison Table-PFAS and PFAS alternatives.

Table 128. Global market Size 2023-2026 (USD Billions).

Table 129. Market size 2026-2030 (USD Billions).

Table 130. Long-Term Market Projections (2035).

## List Of Figures

### LIST OF FIGURES

Figure 1. Types of PFAS.

Figure 2. Structure of PFAS-based polymer finishes.

Figure 3. Water and Oil Repellent Textile Coating.

Figure 4. Main PFAS exposure route.

Figure 5. Main sources of perfluorinated compounds (PFC) and general pathways that these compounds may take toward human exposure.

Figure 6. Photolithography process in semiconductor manufacturing.

Figure 7. PFAS containing Chemicals by Technology Node.

Figure 8. The photoresist application process in photolithography.

Figure 9: Contact angle on superhydrophobic coated surface.

Figure 10. PEMFC Working Principle.

Figure 11. Schematic representation of a Membrane Electrode Assembly (MEA).

Figure 12. Slippery Liquid-Infused Porous Surfaces (SLIPS).

Figure 13. Aclarity's Octa system.

Figure 14. Process for treatment of PFAS in water.

Figure 15. Octa™ system.

Figure 16. Gradient Forever Gone.

Figure 17. PFAS Annihilator® unit.

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