

Per- and polyfluoroalkyl substances (PFAS) and Alternatives Global Market 2024

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Abstracts

PFAS, otherwise known as 'forever chemicals,' are widespread in an array of everyday products. PFAS are a growing concern due to their environmental persistence and potential health risks. These manufactured chemicals are widespread and found in numerous everyday products like non-stick cookware, water repellents, stain-resistant fabrics, firefighting foams, and food packaging, where they are valued due to their high performance. There are more than 3000 types of PFAS commercially available on the world market today. However, regulatory restrictions on PFAS are gaining momentum. Notably, California (by 2025) and New York (by 2024) have taken the lead by implementing bans, and the European Union is actively pushing for a similar restriction. As a result, various alternatives to PFAS across different industries and applications are being developed in response to growing environmental concerns and regulatory pressures surrounding PFAS use.

This extensive market research report provides a thorough analysis of the global Perand Polyfluoroalkyl Substances (PFAS) market and the emerging alternatives sector. As environmental concerns and regulatory pressures mount, this report offers crucial insights into the shifting landscape of PFAS usage, alternatives development, and market dynamics across various industries. Report contents include:

Types of PFAS, chemical structure, properties, historical development, and types.

Environmental and health concerns associated with PFAS, including their persistence, bioaccumulation, toxicity, and widespread environmental contamination.



Comprehensive overview of the global regulatory landscape including international agreements, European Union regulations, United States policies, and Asian regulatory frameworks.

PFAS usage in key sectors such as semiconductors, textiles and clothing, food packaging, paints and coatings, ion exchange membranes, energy, low-loss materials for 5G, cosmetics, firefighting foam, automotive, electronics, and medical devices. Each industry section provides an overview of PFAS applications, regulatory implications, and emerging alternatives.

PFAS alternatives including PFAS-free release agents, non-fluorinated surfactants and dispersants, PFAS-free water and oil-repellent materials, fluorine-free liquid-repellent surfaces, and PFAS-free colorless transparent polyimide.

Methods for PFAS degradation and elimination, with a focus on bio-friendly approaches such as phytoremediation, microbial degradation, enzyme-based degradation, and other green technologies.

Market analysis and future outlook including a global PFAS market overview, regional market analysis, and market segmentation by industry.

Assessment of challenges and barriers to PFAS substitution, including technical performance gaps, cost considerations, and regulatory uncertainty. It offers future market projections, providing valuable insights for stakeholders across the PFAS and alternatives value chain.

Profiles of over 500 companies developing PFAS alternatives and PFAS degradation chemicals.

This report is an essential resource for:

Chemical manufacturers and suppliers

Environmental consultants and remediation specialists

Regulatory bodies and policymakers



Industry executives in sectors utilizing PFAS

Investors and financial analysts focusing on chemical and environmental markets

Research institutions and academics studying PFAS and alternatives

Sustainability professionals and environmental NGOs



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