Fluoropolymer Materials: Technologies and Global Markets

Market Research Report | 2023-12-07 | 178 pages | BCC Research

AVAILABLE LICENSES:

- Single User License $5500.00
- 2-5 Users License $6600.00
- Site License $7920.00
- Enterprise License $9504.00

Report description:

Description

Report Scope:

The report provides an overview of the global market for fluoropolymer materials and analyzes key market trends. The base year considered for analysis is 2022, while the market estimates and forecasts are given for 2023 to 2028. The market estimates are only provided in terms of revenue (USD million) and volume (kilotons) at the global level, whereas for the remaining segments, only volume estimation is provided.

The market is segmented based on resin type, end-user industry, and region. Within resin type, PTFE, PVDF, FEP, ETFE, other fluoropolymers, and fluoroelastomers are considered. Other fluoropolymers include polyvinyl fluoride (PVF), polychlorotrifluoroethylene (PCTFE), perfluoroalkoxy alkanes (PFA), ethylene-chlorotrifluoroethylene (ECTFE), sulfonated tetrafluoroethylene (PFSA), amorphous fluoropolymers (AF), poly(TFE-CO-HFP-CO-VDF) (THV) and fluoroplastic foam resin (FFR). Within the end-user segmentation, industrial, electrical and electronics, transportation, building and construction, and other markets are considered. Other markets include cookware and bakeware product coatings, medical devices, and fabric protection.

The report study provides a cross-segmentation analysis at the global level of each resin type within end-user and regional segments. This enables the reader to attain a better understanding of the relative penetration of each resin within every end-user as well as regional segment.

The report also analyzes fluoropolymer technology developments, industry structure, and market dynamics. Profiles of the leading fluoropolymer resin companies and processors describe company products, markets, geographic focus, market shares, and recent corporate developments. The impact of COVID-19 and the Russia-Ukraine war conflict has also been considered while deriving market estimates.

Report Includes:

- 38 data tables and 56 additional tables
- An up-to-date overview and industry analysis of the global markets for fluoropolymer materials (all the commercially available grades actively utilized and consumed worldwide)
- Analyses of the global market trends, with historical market revenue data (sales figures) for 2022, estimates for 2023, forecasts for 2027, and projections of compound annual growth rates (CAGRs) through 2028
- Estimation of the actual market size and growth forecast for fluoropolymers markets both in revenue/value (USD millions) and consumption/volumetric (Kilo tons) terms, and corresponding market share analysis based on resin type, end-use application, and region
- In-depth information (facts and figures) concerning the major factors influencing the progress of this market (drivers, restraints, opportunities, and industry-specific challenges) with respect to specific growth trends, upcoming prospects, and contributions to the overall market
- Analysis of the market growth opportunities with a holistic review of Porter's five forces analysis and PESTLE analysis considering both micro- and macro environmental factors prevailing in the industry
- Understanding of ESG perspectives on the worldwide market for fluoropolymers, with emphasis on the impact of ESG factors on performance, ratings and matrices; consumer attitudes; and ESG followed practices
- A relevant patent analysis with significant allotments of the patent data featuring fluoropolymers
- Identification of the major stakeholders, and analysis of their company competitive landscape based on recent developments, segmental revenues, and operational integration
- Descriptive company profiles of the leading market players, including Arkema, The Chemours Co, Daikin Industries Ltd., Kureha Corp., Saint Gobain, and Solvay

Executive Summary

Summary:

Fluoropolymer materials fall under the category of high-performance thermoplastics. Discovered during the 1940s, fluoropolymer materials were quickly applied to various end-user industries. Fluoropolymers are used in a diverse range of industries ranging from automotive, semiconductor, electronics, and cookware applications. Due to their excellent properties and inert nature, fluoropolymers are also gaining traction for new-age applications in the automotive and electronics sectors.

Although traditional applications are reaching their saturation point, fluoropolymers continue to find new applications. For example, in automotive and aviation markets, fluoropolymers are gaining use because of their ability to provide heat and chemical resistance, strength, durability, and weight reduction. In the electronics sector, more stringent technical and environmental specifications will promote the use of high-performance materials that are inherently flame-retardant. Other examples of developmental applications for fluoropolymers include lithium-ion batteries, fuel-cell membranes, aircraft interior components, and backsheets for photovoltaic modules.

At present, the key end-user industries, mainly transportation and electrical and electronics, are undergoing significant transitions. These megatrends are playing a vital role in shaping the overall fluoropolymers market. Energy transition from conventional to renewable energy sources is, in turn, driving demand for fluoropolymers in solar, wind and lithium-ion batteries. The surge in semiconductor demand is also acting as a key driver for fluoropolymers. These materials offer outstanding insulation properties as well as electrical conductivity, thus making them suitable for usage in EVs. In addition, strict government regulations pertaining to emissions and safety standards are also pushing the
fluoropolymers demand in automotive.

PVDF is the fastest-growing fluoropolymer product, especially in solar and lithium-ion battery applications. Demand for PVDF is expected to grow exponentially due to its rising application in lithiumion batteries and architectural coatings. The growth in the chemical processing, cookware, bakeware, and medical markets are also important driving forces for the fluoropolymer industry.

Fluoroelastomer demand is growing at a steady pace with lucrative growth avenues from the transportation sector. Demand is being driven by new product developments in sealing applications (which result in better performance), further tightening of emissions standards in many industrialized countries and strong expansion of automobile production. Fluoroelastomers are also gaining ground in the medical and food processing industries as they provide long-term protection against high temperatures and also fight corrosion. Demand for fluoropolymers is also likely to expand in the medical sector, led by rising applications in catheters, filters and implantable medical devices.

Table of Contents:

SCOTTS INTERNATIONAL

Fluoropolymer Materials: Technologies and Global Markets

Market Research Report | 2023-12-07 | 178 pages | BCC Research

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	$5500.00
	2-5 Users License	$6600.00
	Site License	$7920.00
	Enterprise License	$9504.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	
Zip Code*		Country*	
		Date	2025-06-26
		Signature