+357 96 030922
info@marketpublishers.com

Global Phosphorus Flame Retardant for Engineering Plastics Supply, Demand and Key Producers, 2026-2032

https://marketpublishers.com/r/G13820B6E463EN.html
Date: May 2026
Pages: 122
Price: US$ 4,480.00 (Single User License)
ID: G13820B6E463EN

Abstracts

The global Phosphorus Flame Retardant for Engineering Plastics market size is expected to reach $ 5405 million by 2032, rising at a market growth of 4.6% CAGR during the forecast period (2026-2032).

Phosphorus-based flame retardants for engineering plastics are a class of functional additives with phosphorus as the core element. They enhance the flame retardant properties of engineering plastics through gas-phase flame retardancy and condensed-phase char formation mechanisms. Widely used in materials such as polycarbonate, nylon, and PBT, they are important environmentally friendly alternatives to halogen-based flame retardants. Based on industry application scale and price range, global sales of phosphorus-based flame retardants for engineering plastics are estimated at approximately 920,000 tons in 2025, with an average unit price of approximately US$4,200 per ton (equivalent to approximately US$4.2 per kilogram). Capacity utilization is estimated at approximately 77%. The upstream of the industry chain mainly includes basic chemical raw material companies such as yellow phosphorus, phosphoric acid, and propylene oxide; the midstream consists of phosphorus-based flame retardant manufacturers and modified plastics manufacturers; and the downstream covers fields such as electronics, automotive, home appliance manufacturing, building materials, and communication equipment. The overall gross profit margin is approximately 27%, reaching 35% for companies with high-end product and formulation capabilities. The product cost structure mainly consists of raw material costs (approximately 62%), energy and environmental costs (approximately 12%), and labor and manufacturing costs (approximately 2%). Manufacturing costs account for approximately 10%, equipment depreciation for approximately 6%, and R&D and other costs for approximately 10%. On the demand side, downstream demand includes flame-

+357 96 030922
info@marketpublishers.com

retardant materials for electronics and electrical appliances, lightweight materials for automobiles, upgrades to home appliance safety standards, fire-resistant building materials, and insulation materials for new energy equipment. Downstream customers include electronic component manufacturers, automotive parts companies, home appliance manufacturers, communication equipment manufacturers, engineering plastics modification companies, and building materials companies. On the business opportunity side, policy-driven growth stems from global regulations on halogen-free flame retardants and strengthened fire safety standards, promoting the replacement of traditional halogen-based products with phosphorus-based products. Technological innovation is driven by continuous breakthroughs in high-efficiency, low-addition formulations, high-temperature resistance, and low-smoke, low-toxicity technologies, while compatibility with engineering plastics continues to improve. Changing consumer demands reflect end-users' increased emphasis on safety, environmental protection, and sustainable development, leading to continued growth in demand for halogen-free flame-retardant materials. Furthermore, the new energy and electric vehicle sectors are generating new incremental demand, resulting in an overall trend of continuous demand expansion for the industry.

The engineering plastics phosphorus-based flame retardant industry is at a critical stage of transformation from policy-driven to technology- and application-driven. Globally, the continuous upgrading of environmental regulations and fire safety standards is accelerating the replacement of traditional halogen-based products with halogen-free flame retardants. This trend is particularly evident in the electronics, electrical, and automotive industries. Meanwhile, the rapid development of the new energy and electric vehicle industries has further amplified the demand for high-performance flame retardant materials, giving the industry strong growth certainty. From a competitive perspective, industry concentration is gradually increasing, with companies possessing integrated raw material advantages and high-end product R&D capabilities becoming more competitive. Meanwhile, mid-to-low-end products face both price competition and profit pressure. In the future, the core of the industry's development lies in technological upgrading and application expansion. On the one hand, high-efficiency, low-additive, low-smoke, low-toxicity, and high-heat-resistant products will become the mainstream direction. On the other hand, deep compounding with engineering plastics and customized solutions will become important means for enterprises to differentiate themselves in the market. In addition, fluctuations in raw material prices and rising environmental costs will continue to affect the industry's profit level, forcing enterprises to transform towards large-scale and refined management. In the long term, with the upgrading of electronic products, the electrification of automobiles, and the improvement of building safety standards, phosphorus-based flame retardants for

+357 96 030922
info@marketpublishers.com

engineering plastics will continue to benefit from the expansion of downstream demand and gradually develop towards high performance and green development. The industry as a whole has the potential for steady growth in the medium and long term.

This report studies the global Phosphorus Flame Retardant for Engineering Plastics production, demand, key manufacturers, and key regions.

This report is a detailed and comprehensive analysis of the world market for Phosphorus Flame Retardant for Engineering Plastics and provides market size (US$ million) and Year-over-Year (YoY) Growth, considering 2025 as the base year. This report explores demand trends and competition, as well as details the characteristics of Phosphorus Flame Retardant for Engineering Plastics that contribute to its increasing demand across many markets.

Highlights and key features of the study
Global Phosphorus Flame Retardant for Engineering Plastics total production and demand, 2021-2032, (Tons)
Global Phosphorus Flame Retardant for Engineering Plastics total production value, 2021-2032, (USD Million)
Global Phosphorus Flame Retardant for Engineering Plastics production by region & country, production, value, CAGR, 2021-2032, (USD Million) & (Tons), (based on production site)
Global Phosphorus Flame Retardant for Engineering Plastics consumption by region & country, CAGR, 2021-2032 & (Tons)
U.S. VS China: Phosphorus Flame Retardant for Engineering Plastics domestic production, consumption, key domestic manufacturers and share
Global Phosphorus Flame Retardant for Engineering Plastics production by manufacturer, production, price, value and market share 2021-2026, (USD Million) & (Tons)
Global Phosphorus Flame Retardant for Engineering Plastics production by Type, production, value, CAGR, 2021-2032, (USD Million) & (Tons)
Global Phosphorus Flame Retardant for Engineering Plastics production by Application, production, value, CAGR, 2021-2032, (USD Million) & (Tons)

This report profiles key players in the global Phosphorus Flame Retardant for Engineering Plastics market based on the following parameters - company overview, production, value, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Teijin, ICL, Zhejiang Wansheng, Jiangsu Yoke Technology, GO YEN CHEMICAL INDUSTRIAL,

+357 96 030922
info@marketpublishers.com

Daihachi Chemical Industry, ADEKA, Chang Chun Group, Totai (Inner Mongolia) Corporation, Shandong Moris Environment Industry, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Stakeholders would have ease in decision-making through various strategy matrices used in analyzing the World Phosphorus Flame Retardant for Engineering Plastics market

Detailed Segmentation:

Each section contains quantitative market data including market by value (US$ Millions), volume (production, consumption) & (Tons) and average price (US$/Ton) by manufacturer, by Type, and by Application. Data is given for the years 2021-2032 by year with 2025 as the base year, 2026 as the estimate year, and 2027-2032 as the forecast year.

Global Phosphorus Flame Retardant for Engineering Plastics Market, By Region:

United States

China

Europe

Japan

South Korea

ASEAN

India

Rest of World

Global Phosphorus Flame Retardant for Engineering Plastics Market, Segmentation by Type:

+357 96 030922
info@marketpublishers.com

Chlorophosphate Ester

Halogen-Free Phosphate Ester

Hypophosphate

Other

Global Phosphorus Flame Retardant for Engineering Plastics Market, Segmentation by Variety:

Triphenyl Phosphate (TPP)

Resorcinol Bis(Diphenyl Phosphate) (RDP)

BDP

Others

Global Phosphorus Flame Retardant for Engineering Plastics Market, Segmentation by Structure:

Organophosphorus Flame Retardants

Inorganic Phosphorus Flame Retardants

Global Phosphorus Flame Retardant for Engineering Plastics Market, Segmentation by Application:

Aerospace

Automotive

Consumer Electronics

Construction & Furniture

+357 96 030922
info@marketpublishers.com

Other

Companies Profiled:

Teijin

ICL

Zhejiang Wansheng

Jiangsu Yoke Technology

GO YEN CHEMICAL INDUSTRIAL

Daihachi Chemical Industry

ADEKA

Chang Chun Group

Totai (Inner Mongolia) Corporation

Shandong Moris Environment Industry

Nantong Jiangshan Agrochemical & Chemicals

Shouguang Weidong Chemical

Anhui RunYue Technology

Key Questions Answered:

1. How big is the global Phosphorus Flame Retardant for Engineering Plastics market?
2. What is the demand of the global Phosphorus Flame Retardant for Engineering Plastics market?
3. What is the year over year growth of the global Phosphorus Flame Retardant for Engineering Plastics market?

+357 96 030922
info@marketpublishers.com

4. What is the production and production value of the global Phosphorus Flame Retardant for Engineering Plastics market?
5. Who are the key producers in the global Phosphorus Flame Retardant for Engineering Plastics market?
6. What are the growth factors driving the market demand?

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

3 WORLD MANUFACTURERS COMPETITIVE ANALYSIS

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

5 MARKET ANALYSIS BY TYPE

6 MARKET ANALYSIS BY VARIETY

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

9 COMPANY PROFILES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Global Phosphorus Flame Retardant for Engineering Plastics Supply, Demand and Key Producers, 2026-2032

Product link: https://marketpublishers.com/r/G13820B6E463EN.html

Price: US$ 4,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G13820B6E463EN.html