

Global Polyacrylonitrile Based (PAN) Carbon Fiber Market 2023 by Manufacturers, Regions, Type and Application, Forecast to 2029

https://marketpublishers.com/r/G8910AD9F4D8EN.html

Date: March 2023

Pages: 118

Price: US\$ 3,480.00 (Single User License)

ID: G8910AD9F4D8EN

Abstracts

According to our (Global Info Research) latest study, the global Polyacrylonitrile Based (PAN) Carbon Fiber market size was valued at USD million in 2022 and is forecast to a readjusted size of USD million by 2029 with a CAGR of % during review period. The influence of COVID-19 and the Russia-Ukraine War were considered while estimating market sizes.

Polyacrylonitrile-based (PAN) carbon fiber uses polyacrylonitrile (PAN) as a raw material, which has excellent mechanical properties and chemical stability, and occupies a mainstream position in carbon fibers.

This report is a detailed and comprehensive analysis for global Polyacrylonitrile Based (PAN) Carbon Fiber market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2023, are provided.

Key Features:

Global Polyacrylonitrile Based (PAN) Carbon Fiber market size and forecasts, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Polyacrylonitrile Based (PAN) Carbon Fiber market size and forecasts by region



and country, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Polyacrylonitrile Based (PAN) Carbon Fiber market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (Tons), and average selling prices (US\$/Ton), 2018-2029

Global Polyacrylonitrile Based (PAN) Carbon Fiber market shares of main players, shipments in revenue (\$ Million), sales quantity (Tons), and ASP (US\$/Ton), 2018-2023

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Polyacrylonitrile Based (PAN) Carbon Fiber

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Polyacrylonitrile Based (PAN) Carbon Fiber 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 Toray, SGL, Cytec Solvay, Zoltek and Toho Tenax (Teijin), etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals, COVID-19 and Russia-Ukraine War Influence.

Market Segmentation

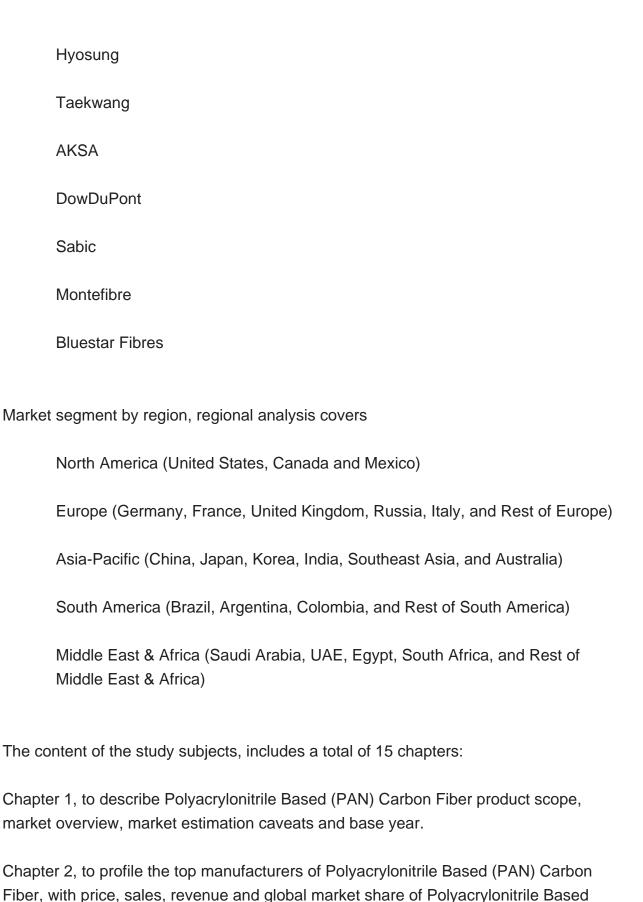
Polyacrylonitrile Based (PAN) Carbon Fiber market is split by Type and by Application. For the period 2018-2029, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type









(PAN) Carbon Fiber from 2018 to 2023.



Chapter 3, the Polyacrylonitrile Based (PAN) Carbon Fiber competitive situation, sales quantity, revenue and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Polyacrylonitrile Based (PAN) Carbon Fiber breakdown data are shown at the regional level, to show the sales quantity, consumption value and growth by regions, from 2018 to 2029.

Chapter 5 and 6, to segment the sales by Type and application, with sales market share and growth rate by type, application, from 2018 to 2029.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value and market share for key countries in the world, from 2017 to 2022.and Polyacrylonitrile Based (PAN) Carbon Fiber market forecast, by regions, type and application, with sales and revenue, from 2024 to 2029.

Chapter 12, market dynamics, drivers, restraints, trends, Porters Five Forces analysis, and Influence of COVID-19 and Russia-Ukraine War.

Chapter 13, the key raw materials and key suppliers, and industry chain of Polyacrylonitrile Based (PAN) Carbon Fiber.

Chapter 14 and 15, to describe Polyacrylonitrile Based (PAN) Carbon Fiber sales channel, distributors, customers, research findings and conclusion.



Contents

1 MARKET OVERVIEW

- 1.1 Product Overview and Scope of Polyacrylonitrile Based (PAN) Carbon Fiber
- 1.2 Market Estimation Caveats and Base Year
- 1.3 Market Analysis by Type
 - 1.3.1 Overview: Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption

Value by Type: 2018 Versus 2022 Versus 2029

- 1.3.2 Rotary
- 1.3.3 Filament
- 1.3.4 Others
- 1.4 Market Analysis by Application
- 1.4.1 Overview: Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption

Value by Application: 2018 Versus 2022 Versus 2029

- 1.4.2 Aerospace
- 1.4.3 National Defense
- 1.4.4 Automobile
- 1.4.5 Wind Power
- 1.4.6 Sport
- 1.4.7 Others
- 1.5 Global Polyacrylonitrile Based (PAN) Carbon Fiber Market Size & Forecast
- 1.5.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018 & 2022 & 2029)
 - 1.5.2 Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (2018-2029)
 - 1.5.3 Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price (2018-2029)

2 MANUFACTURERS PROFILES

- 2.1 Toray
 - 2.1.1 Toray Details
 - 2.1.2 Toray Major Business
 - 2.1.3 Toray Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.1.4 Toray Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

- 2.1.5 Toray Recent Developments/Updates
- 2.2 SGL
 - 2.2.1 SGL Details
 - 2.2.2 SGL Major Business



- 2.2.3 SGL Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.2.4 SGL Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.2.5 SGL Recent Developments/Updates
- 2.3 Cytec Solvay
 - 2.3.1 Cytec Solvay Details
 - 2.3.2 Cytec Solvay Major Business
 - 2.3.3 Cytec Solvay Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.3.4 Cytec Solvay Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

- 2.3.5 Cytec Solvay Recent Developments/Updates
- 2.4 Zoltek
 - 2.4.1 Zoltek Details
 - 2.4.2 Zoltek Major Business
 - 2.4.3 Zoltek Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.4.4 Zoltek Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

- 2.4.5 Zoltek Recent Developments/Updates
- 2.5 Toho Tenax (Teijin)
 - 2.5.1 Toho Tenax (Teijin) Details
 - 2.5.2 Toho Tenax (Teijin) Major Business
- 2.5.3 Toho Tenax (Teijin) Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.5.4 Toho Tenax (Teijin) Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.5.5 Toho Tenax (Teijin) Recent Developments/Updates
- 2.6 Mitsubishi Chemical Corporation
 - 2.6.1 Mitsubishi Chemical Corporation Details
 - 2.6.2 Mitsubishi Chemical Corporation Major Business
- 2.6.3 Mitsubishi Chemical Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.6.4 Mitsubishi Chemical Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.6.5 Mitsubishi Chemical Corporation Recent Developments/Updates
- 2.7 Hexcel Corporation
 - 2.7.1 Hexcel Corporation Details
 - 2.7.2 Hexcel Corporation Major Business
- 2.7.3 Hexcel Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services



- 2.7.4 Hexcel Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.7.5 Hexcel Corporation Recent Developments/Updates
- 2.8 Formosa Plastics Corporation
 - 2.8.1 Formosa Plastics Corporation Details
 - 2.8.2 Formosa Plastics Corporation Major Business
- 2.8.3 Formosa Plastics Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.8.4 Formosa Plastics Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.8.5 Formosa Plastics Corporation Recent Developments/Updates
- 2.9 Hyosung
 - 2.9.1 Hyosung Details
 - 2.9.2 Hyosung Major Business
 - 2.9.3 Hyosung Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.9.4 Hyosung Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average
- Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.9.5 Hyosung Recent Developments/Updates
- 2.10 Taekwang
 - 2.10.1 Taekwang Details
 - 2.10.2 Taekwang Major Business
 - 2.10.3 Taekwang Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.10.4 Taekwang Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.10.5 Taekwang Recent Developments/Updates
- 2.11 AKSA
 - 2.11.1 AKSA Details
 - 2.11.2 AKSA Major Business
 - 2.11.3 AKSA Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.11.4 AKSA Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

- 2.11.5 AKSA Recent Developments/Updates
- 2.12 DowDuPont
 - 2.12.1 DowDuPont Details
 - 2.12.2 DowDuPont Major Business
 - 2.12.3 DowDuPont Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.12.4 DowDuPont Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity,

Average Price, Revenue, Gross Margin and Market Share (2018-2023)

2.12.5 DowDuPont Recent Developments/Updates



- 2.13 Sabic
 - 2.13.1 Sabic Details
 - 2.13.2 Sabic Major Business
 - 2.13.3 Sabic Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
 - 2.13.4 Sabic Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average

Price, Revenue, Gross Margin and Market Share (2018-2023)

- 2.13.5 Sabic Recent Developments/Updates
- 2.14 Montefibre
 - 2.14.1 Montefibre Details
 - 2.14.2 Montefibre Major Business
 - 2.14.3 Montefibre Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.14.4 Montefibre Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
- 2.14.5 Montefibre Recent Developments/Updates
- 2.15 Bluestar Fibres
 - 2.15.1 Bluestar Fibres Details
 - 2.15.2 Bluestar Fibres Major Business
- 2.15.3 Bluestar Fibres Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- 2.15.4 Bluestar Fibres Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2018-2023)
 - 2.15.5 Bluestar Fibres Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: POLYACRYLONITRILE BASED (PAN) CARBON FIBER BY MANUFACTURER

- 3.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Manufacturer (2018-2023)
- 3.2 Global Polyacrylonitrile Based (PAN) Carbon Fiber Revenue by Manufacturer (2018-2023)
- 3.3 Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Manufacturer (2018-2023)
- 3.4 Market Share Analysis (2022)
- 3.4.1 Producer Shipments of Polyacrylonitrile Based (PAN) Carbon Fiber by Manufacturer Revenue (\$MM) and Market Share (%): 2022
- 3.4.2 Top 3 Polyacrylonitrile Based (PAN) Carbon Fiber Manufacturer Market Share in 2022
- 3.4.2 Top 6 Polyacrylonitrile Based (PAN) Carbon Fiber Manufacturer Market Share in 2022



- 3.5 Polyacrylonitrile Based (PAN) Carbon Fiber Market: Overall Company Footprint Analysis
 - 3.5.1 Polyacrylonitrile Based (PAN) Carbon Fiber Market: Region Footprint
- 3.5.2 Polyacrylonitrile Based (PAN) Carbon Fiber Market: Company Product Type Footprint
- 3.5.3 Polyacrylonitrile Based (PAN) Carbon Fiber Market: Company Product Application Footprint
- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

- 4.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Region
- 4.1.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2018-2029)
- 4.1.2 Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2018-2029)
- 4.1.3 Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Region (2018-2029)
- 4.2 North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029)
- 4.3 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029)
- 4.4 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029)
- 4.5 South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029)
- 4.6 Middle East and Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029)

5 MARKET SEGMENT BY TYPE

- 5.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type
 (2018-2029)
- 5.2 Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Type (2018-2029)
- 5.3 Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Type (2018-2029)



6 MARKET SEGMENT BY APPLICATION

- 6.1 Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2029)
- 6.2 Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Application (2018-2029)
- 6.3 Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Application (2018-2029)

7 NORTH AMERICA

- 7.1 North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2029)
- 7.2 North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2029)
- 7.3 North America Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Country
- 7.3.1 North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2029)
- 7.3.2 North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2029)
 - 7.3.3 United States Market Size and Forecast (2018-2029)
 - 7.3.4 Canada Market Size and Forecast (2018-2029)
 - 7.3.5 Mexico Market Size and Forecast (2018-2029)

8 EUROPE

- 8.1 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2029)
- 8.2 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2029)
- 8.3 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Country
- 8.3.1 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2029)
- 8.3.2 Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2029)
 - 8.3.3 Germany Market Size and Forecast (2018-2029)
 - 8.3.4 France Market Size and Forecast (2018-2029)
 - 8.3.5 United Kingdom Market Size and Forecast (2018-2029)
 - 8.3.6 Russia Market Size and Forecast (2018-2029)



8.3.7 Italy Market Size and Forecast (2018-2029)

9 ASIA-PACIFIC

- 9.1 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2029)
- 9.2 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2029)
- 9.3 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Region
- 9.3.1 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2018-2029)
- 9.3.2 Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2018-2029)
 - 9.3.3 China Market Size and Forecast (2018-2029)
 - 9.3.4 Japan Market Size and Forecast (2018-2029)
 - 9.3.5 Korea Market Size and Forecast (2018-2029)
 - 9.3.6 India Market Size and Forecast (2018-2029)
 - 9.3.7 Southeast Asia Market Size and Forecast (2018-2029)
- 9.3.8 Australia Market Size and Forecast (2018-2029)

10 SOUTH AMERICA

- 10.1 South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2029)
- 10.2 South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2029)
- 10.3 South America Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Country 10.3.1 South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2029)
- 10.3.2 South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2029)
 - 10.3.3 Brazil Market Size and Forecast (2018-2029)
 - 10.3.4 Argentina Market Size and Forecast (2018-2029)

11 MIDDLE EAST & AFRICA

- 11.1 Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2029)
- 11.2 Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by



Application (2018-2029)

- 11.3 Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Market Size by Country
- 11.3.1 Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2029)
- 11.3.2 Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2029)
 - 11.3.3 Turkey Market Size and Forecast (2018-2029)
 - 11.3.4 Egypt Market Size and Forecast (2018-2029)
 - 11.3.5 Saudi Arabia Market Size and Forecast (2018-2029)
 - 11.3.6 South Africa Market Size and Forecast (2018-2029)

12 MARKET DYNAMICS

- 12.1 Polyacrylonitrile Based (PAN) Carbon Fiber Market Drivers
- 12.2 Polyacrylonitrile Based (PAN) Carbon Fiber Market Restraints
- 12.3 Polyacrylonitrile Based (PAN) Carbon Fiber Trends Analysis
- 12.4 Porters Five Forces Analysis
 - 12.4.1 Threat of New Entrants
 - 12.4.2 Bargaining Power of Suppliers
 - 12.4.3 Bargaining Power of Buyers
 - 12.4.4 Threat of Substitutes
 - 12.4.5 Competitive Rivalry
- 12.5 Influence of COVID-19 and Russia-Ukraine War
 - 12.5.1 Influence of COVID-19
 - 12.5.2 Influence of Russia-Ukraine War

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Polyacrylonitrile Based (PAN) Carbon Fiber and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Polyacrylonitrile Based (PAN) Carbon Fiber
- 13.3 Polyacrylonitrile Based (PAN) Carbon Fiber Production Process
- 13.4 Polyacrylonitrile Based (PAN) Carbon Fiber Industrial Chain

14 SHIPMENTS BY DISTRIBUTION CHANNEL

- 14.1 Sales Channel
 - 14.1.1 Direct to End-User



- 14.1.2 Distributors
- 14.2 Polyacrylonitrile Based (PAN) Carbon Fiber Typical Distributors
- 14.3 Polyacrylonitrile Based (PAN) Carbon Fiber Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

- 16.1 Methodology
- 16.2 Research Process and Data Source
- 16.3 Disclaimer



List Of Tables

LIST OF TABLES

Table 1. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Type, (USD Million), 2018 & 2022 & 2029

Table 2. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Application, (USD Million), 2018 & 2022 & 2029

Table 3. Toray Basic Information, Manufacturing Base and Competitors

Table 4. Toray Major Business

Table 5. Toray Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services

Table 6. Toray Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),

Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 7. Toray Recent Developments/Updates

Table 8. SGL Basic Information, Manufacturing Base and Competitors

Table 9. SGL Major Business

Table 10. SGL Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services

Table 11. SGL Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),

Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 12. SGL Recent Developments/Updates

Table 13. Cytec Solvay Basic Information, Manufacturing Base and Competitors

Table 14. Cytec Solvay Major Business

Table 15. Cytec Solvay Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services

Table 16. Cytec Solvay Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 17. Cytec Solvay Recent Developments/Updates

Table 18. Zoltek Basic Information, Manufacturing Base and Competitors

Table 19. Zoltek Major Business

Table 20. Zoltek Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services

Table 21. Zoltek Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),

Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 22. Zoltek Recent Developments/Updates

Table 23. Toho Tenax (Teijin) Basic Information, Manufacturing Base and Competitors

Table 24. Toho Tenax (Teijin) Major Business



- Table 25. Toho Tenax (Teijin) Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 26. Toho Tenax (Teijin) Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 27. Toho Tenax (Teijin) Recent Developments/Updates
- Table 28. Mitsubishi Chemical Corporation Basic Information, Manufacturing Base and Competitors
- Table 29. Mitsubishi Chemical Corporation Major Business
- Table 30. Mitsubishi Chemical Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 31. Mitsubishi Chemical Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 32. Mitsubishi Chemical Corporation Recent Developments/Updates
- Table 33. Hexcel Corporation Basic Information, Manufacturing Base and Competitors
- Table 34. Hexcel Corporation Major Business
- Table 35. Hexcel Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 36. Hexcel Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 37. Hexcel Corporation Recent Developments/Updates
- Table 38. Formosa Plastics Corporation Basic Information, Manufacturing Base and Competitors
- Table 39. Formosa Plastics Corporation Major Business
- Table 40. Formosa Plastics Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 41. Formosa Plastics Corporation Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 42. Formosa Plastics Corporation Recent Developments/Updates
- Table 43. Hyosung Basic Information, Manufacturing Base and Competitors
- Table 44. Hyosung Major Business
- Table 45. Hyosung Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 46. Hyosung Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 47. Hyosung Recent Developments/Updates



- Table 48. Taekwang Basic Information, Manufacturing Base and Competitors
- Table 49. Taekwang Major Business
- Table 50. Taekwang Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 51. Taekwang Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 52. Taekwang Recent Developments/Updates
- Table 53. AKSA Basic Information, Manufacturing Base and Competitors
- Table 54. AKSA Major Business
- Table 55. AKSA Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 56. AKSA Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 57. AKSA Recent Developments/Updates
- Table 58. DowDuPont Basic Information, Manufacturing Base and Competitors
- Table 59. DowDuPont Major Business
- Table 60. DowDuPont Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 61. DowDuPont Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 62. DowDuPont Recent Developments/Updates
- Table 63. Sabic Basic Information, Manufacturing Base and Competitors
- Table 64. Sabic Major Business
- Table 65. Sabic Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 66. Sabic Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 67. Sabic Recent Developments/Updates
- Table 68. Montefibre Basic Information, Manufacturing Base and Competitors
- Table 69. Montefibre Major Business
- Table 70. Montefibre Polyacrylonitrile Based (PAN) Carbon Fiber Product and Services
- Table 71. Montefibre Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons),
- Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)
- Table 72. Montefibre Recent Developments/Updates
- Table 73. Bluestar Fibres Basic Information, Manufacturing Base and Competitors
- Table 74. Bluestar Fibres Major Business
- Table 75. Bluestar Fibres Polyacrylonitrile Based (PAN) Carbon Fiber Product and



Services

Table 76. Bluestar Fibres Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity (Tons), Average Price (US\$/Ton), Revenue (USD Million), Gross Margin and Market Share (2018-2023)

Table 77. Bluestar Fibres Recent Developments/Updates

Table 78. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Manufacturer (2018-2023) & (Tons)

Table 79. Global Polyacrylonitrile Based (PAN) Carbon Fiber Revenue by Manufacturer (2018-2023) & (USD Million)

Table 80. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Manufacturer (2018-2023) & (US\$/Ton)

Table 81. Market Position of Manufacturers in Polyacrylonitrile Based (PAN) Carbon Fiber, (Tier 1, Tier 2, and Tier 3), Based on Consumption Value in 2022

Table 82. Head Office and Polyacrylonitrile Based (PAN) Carbon Fiber Production Site of Key Manufacturer

Table 83. Polyacrylonitrile Based (PAN) Carbon Fiber Market: Company Product Type Footprint

Table 84. Polyacrylonitrile Based (PAN) Carbon Fiber Market: Company Product Application Footprint

Table 85. Polyacrylonitrile Based (PAN) Carbon Fiber New Market Entrants and Barriers to Market Entry

Table 86. Polyacrylonitrile Based (PAN) Carbon Fiber Mergers, Acquisition, Agreements, and Collaborations

Table 87. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2018-2023) & (Tons)

Table 88. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2024-2029) & (Tons)

Table 89. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2018-2023) & (USD Million)

Table 90. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2024-2029) & (USD Million)

Table 91. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Region (2018-2023) & (US\$/Ton)

Table 92. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Region (2024-2029) & (US\$/Ton)

Table 93. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 94. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2024-2029) & (Tons)



Table 95. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Type (2018-2023) & (USD Million)

Table 96. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Type (2024-2029) & (USD Million)

Table 97. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Type (2018-2023) & (US\$/Ton)

Table 98. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Type (2024-2029) & (US\$/Ton)

Table 99. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 100. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 101. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Application (2018-2023) & (USD Million)

Table 102. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Application (2024-2029) & (USD Million)

Table 103. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Application (2018-2023) & (US\$/Ton)

Table 104. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Application (2024-2029) & (US\$/Ton)

Table 105. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 106. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2024-2029) & (Tons)

Table 107. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 108. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 109. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2023) & (Tons)

Table 110. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2024-2029) & (Tons)

Table 111. North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2023) & (USD Million)

Table 112. North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2024-2029) & (USD Million)

Table 113. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 114. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type



(2024-2029) & (Tons)

Table 115. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 116. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 117. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2023) & (Tons)

Table 118. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2024-2029) & (Tons)

Table 119. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2023) & (USD Million)

Table 120. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2024-2029) & (USD Million)

Table 121. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 122. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2024-2029) & (Tons)

Table 123. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 124. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 125. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2018-2023) & (Tons)

Table 126. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2024-2029) & (Tons)

Table 127. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2018-2023) & (USD Million)

Table 128. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2024-2029) & (USD Million)

Table 129. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 130. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2024-2029) & (Tons)

Table 131. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 132. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 133. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2018-2023) & (Tons)



Table 134. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Country (2024-2029) & (Tons)

Table 135. South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2018-2023) & (USD Million)

Table 136. South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Country (2024-2029) & (USD Million)

Table 137. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2018-2023) & (Tons)

Table 138. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Type (2024-2029) & (Tons)

Table 139. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2018-2023) & (Tons)

Table 140. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Application (2024-2029) & (Tons)

Table 141. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2018-2023) & (Tons)

Table 142. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity by Region (2024-2029) & (Tons)

Table 143. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2018-2023) & (USD Million)

Table 144. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by Region (2024-2029) & (USD Million)

Table 145. Polyacrylonitrile Based (PAN) Carbon Fiber Raw Material

Table 146. Key Manufacturers of Polyacrylonitrile Based (PAN) Carbon Fiber Raw Materials

Table 147. Polyacrylonitrile Based (PAN) Carbon Fiber Typical Distributors

Table 148. Polyacrylonitrile Based (PAN) Carbon Fiber Typical Customers



List Of Figures

LIST OF FIGURES

Figure 1. Polyacrylonitrile Based (PAN) Carbon Fiber Picture

Figure 2. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by

Type, (USD Million), 2018 & 2022 & 2029

Figure 3. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market

Share by Type in 2022

Figure 4. Rotary Examples

Figure 5. Filament Examples

Figure 6. Others Examples

Figure 7. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value by

Application, (USD Million), 2018 & 2022 & 2029

Figure 8. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market

Share by Application in 2022

Figure 9. Aerospace Examples

Figure 10. National Defense Examples

Figure 11. Automobile Examples

Figure 12. Wind Power Examples

Figure 13. Sport Examples

Figure 14. Others Examples

Figure 15. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value,

(USD Million): 2018 & 2022 & 2029

Figure 16. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and

Forecast (2018-2029) & (USD Million)

Figure 17. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity

(2018-2029) & (Tons)

Figure 18. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price

(2018-2029) & (US\$/Ton)

Figure 19. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market

Share by Manufacturer in 2022

Figure 20. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value

Market Share by Manufacturer in 2022

Figure 21. Producer Shipments of Polyacrylonitrile Based (PAN) Carbon Fiber by

Manufacturer Sales Quantity (\$MM) and Market Share (%): 2021

Figure 22. Top 3 Polyacrylonitrile Based (PAN) Carbon Fiber Manufacturer

(Consumption Value) Market Share in 2022

Figure 23. Top 6 Polyacrylonitrile Based (PAN) Carbon Fiber Manufacturer



(Consumption Value) Market Share in 2022

Figure 24. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Region (2018-2029)

Figure 25. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Region (2018-2029)

Figure 26. North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029) & (USD Million)

Figure 27. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029) & (USD Million)

Figure 28. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029) & (USD Million)

Figure 29. South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029) & (USD Million)

Figure 30. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value (2018-2029) & (USD Million)

Figure 31. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 32. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Type (2018-2029)

Figure 33. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Type (2018-2029) & (US\$/Ton)

Figure 34. Global Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 35. Global Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Application (2018-2029)

Figure 36. Global Polyacrylonitrile Based (PAN) Carbon Fiber Average Price by Application (2018-2029) & (US\$/Ton)

Figure 37. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 38. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 39. North America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Country (2018-2029)

Figure 40. North America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Country (2018-2029)

Figure 41. United States Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 42. Canada Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)



Figure 43. Mexico Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 44. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 45. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 46. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Country (2018-2029)

Figure 47. Europe Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Country (2018-2029)

Figure 48. Germany Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 49. France Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 50. United Kingdom Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 51. Russia Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 52. Italy Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 53. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 54. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 55. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Region (2018-2029)

Figure 56. Asia-Pacific Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Region (2018-2029)

Figure 57. China Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 58. Japan Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 59. Korea Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 60. India Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 61. Southeast Asia Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 62. Australia Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value



and Growth Rate (2018-2029) & (USD Million)

Figure 63. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 64. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 65. South America Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Country (2018-2029)

Figure 66. South America Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Country (2018-2029)

Figure 67. Brazil Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 68. Argentina Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 69. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Type (2018-2029)

Figure 70. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Application (2018-2029)

Figure 71. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Sales Quantity Market Share by Region (2018-2029)

Figure 72. Middle East & Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value Market Share by Region (2018-2029)

Figure 73. Turkey Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 74. Egypt Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 75. Saudi Arabia Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 76. South Africa Polyacrylonitrile Based (PAN) Carbon Fiber Consumption Value and Growth Rate (2018-2029) & (USD Million)

Figure 77. Polyacrylonitrile Based (PAN) Carbon Fiber Market Drivers

Figure 78. Polyacrylonitrile Based (PAN) Carbon Fiber Market Restraints

Figure 79. Polyacrylonitrile Based (PAN) Carbon Fiber Market Trends

Figure 80. Porters Five Forces Analysis

Figure 81. Manufacturing Cost Structure Analysis of Polyacrylonitrile Based (PAN) Carbon Fiber in 2022

Figure 82. Manufacturing Process Analysis of Polyacrylonitrile Based (PAN) Carbon Fiber

Figure 83. Polyacrylonitrile Based (PAN) Carbon Fiber Industrial Chain

Figure 84. Sales Quantity Channel: Direct to End-User vs Distributors



Figure 85. Direct Channel Pros & Cons

Figure 86. Indirect Channel Pros & Cons

Figure 87. Methodology

Figure 88. Research Process and Data Source



I would like to order

Product name: Global Polyacrylonitrile Based (PAN) Carbon Fiber Market 2023 by Manufacturers,

Regions, Type and Application, Forecast to 2029

Product link: https://marketpublishers.com/r/G8910AD9F4D8EN.html

Price: US\$ 3,480.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer

Service:

info@marketpublishers.com

Payment

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/G8910AD9F4D8EN.html

To pay by Wire Transfer, please, fill in your contact details in the form below:

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below and fax the completed form to $+44\ 20\ 7900\ 3970$

