Polyphenylene Sulfide (PPS) - A Global Market Overview

Description: Polyphenylene Sulfide (PPS) is a semi-crystalline, high performance (or high temperature) engineering plastic that possesses exceptionally high mechanical, high temperature properties and chemical resistance, rendering it to be the alternative of choice for metals and thermosets.

Commercially, PPS is available in different forms and grades such as compounds, fibers, filaments, films and coatings. PPS resin is generally reinforced with various reinforcing materials, specifically glass fibers, in order to improve its mechanical and thermal properties. Such compounds primarily find application in injection molding processes. Unfilled PPS resin can be melt spun and melt blown to produce fibers and fabrics that are used for conveyor belts, flame-resistant clothing and filtration media. PPS resin is also made into films and coatings.

The polyphenylene sulfide market study reviews, analyzes and projects the global market for polyphenylene sulfide for the period 2012-2022 while discussing the global PPS resin installed capacities. Global market for polyphenylene sulfide product types analyzed in the report include PPS compounds and other PPS products such as fibers, films and coatings.

Market for polyphenylene sulfide application areas analyzed in the study include automotive, electrical & electronics, industrial and other applications. Further, the report estimates and projects the global polyphenylene sulfide market in terms of volume in metric tons and value in USD by geographic regions covering North America, Europe, Asia-Pacific and Rest of World. As a value addition, the report also discusses the global market for PPS on neat resin basis.

Global volume consumption of PPS projected to reach 189.4 thousand metric tons, valued at US$2 billion by 2022 at a CAGR of 7.7% between 2016 and 2022. Automotive forms the largest application of PPS in terms of volume consumed, with a market share of 41.5% in 2016 and is expected to maintain a 2016-2022 CAGR of 6.6%.

However, the fastest volume CAGR of 11.2% over the same period is likely to be recorded by industrial applications of PPS, the market for which is projected to stand at 59.7 thousand metric tons in 2022. The growth in industrial applications is mainly attributed to the Asia-Pacific region, led by China, where PPS consumption in filter bags and coatings is expected to witness high growth during 2016-2022 period.

This global market report includes 115 charts (includes a data table and graphical representation for each chart), supported with meaningful and easy to understand graphical presentation, of the market. The statistical tables represent the data for the global market by geographic region, product type and end-use applications of PPS.

This report profiles 21 key global players and 33 major players including PPS resin manufacturers and PPS compounders across the North America - 8; Europe - 9 and Asia-Pacific - 16. The profiles include business overview, product portfolio, PPS resin capacities, addresses, contact numbers and the website addresses.

Contents:

PART A: Global Market Perspective

1. Introduction
   1.1 Product Outline
   1.1.1 What is Polyphenylene Sulfide (PPS)?
   1.1.2 Properties of Polyphenylene Sulfide (PPS)
      1.1.2.1 High Temperature Resistance
      1.1.2.2 Chemical Resistance
      1.1.2.3 Electrical Properties
      1.1.2.4 Flame Retardancy and Wear Resistance
      1.1.2.5 Machining Performance
   1.1.3 Polyphenylene Sulfide (PPS) Product Types
      1.1.3.1 PPS Compounds
1.1.3.2 PPS Fibers and Filaments
1.1.3.3 PPS Films
1.1.3.4 PPS Coatings
1.2 End-use Application Analysis
1.2.1 Automotive Applications
1.2.2 Electrical/Electronic Applications
1.2.3 Industrial/Consumer Applications
1.2.4 Other Applications

2. Key Market Trends
2.1 Auto Industry Acts as Bedrock for Propelling PPS Demand
2.1.1 Global Hybrid and Electric Vehicle Market
  2.1.1.1 Battery Electric Vehicles
  2.1.1.2 Plug-in Hybrid Electric Vehicles
  2.1.1.3 Hybrid Electric Vehicles
2.1.2 Recent Developments in the Usage of PPS Resin in Automotive Industry
  2.1.2.1 PPS in Auto Head-Up Display
  2.1.2.2 Tubular Cooling System’s Weight Lowered with PPS Use
  2.1.2.3 Can “Polimotor 2” Make the Dream of All-Plastic Car Engine Come True?
2.2 PPS Thermoplastics Usage Continue to Grow in Aerospace Industry
  2.2.1 Aircraft Seat Designed Using PPS
2.3 Above Average Growth for PPS to be Driven by Filter Bag Industry in Asia-Pacific

3. Industry Landscape
3.1 Commercial Production Technologies for PPS
3.2 History of Polyphenylene Sulfide (PPS) Industry
3.3 Global PPS Production Capacities

4. Key Global Players
   PPS Resin Manufacturers
   - Celanese Corporation (FORTRON)
   - DIC Corporation
   - Kureha Corporation
   - SK Chemicals Co Ltd (INITZ)
   - Solvay Specialty Polymers USA, LLC
   - Toray Industries, Inc.
   - Tosoh Corporation
   - Zhejiang NHU Special Materials Co Ltd

   PPS Compounders and Processors
   - A. Schulman, Inc.
   - ALBIS Plastic GmbH
   - Ensinger GmbH
   - Kotec Corporation
   - Lati Industria Termoplastici SpA
   - Lehmann & Voss & Co
   - Lion Idemitsu Composites Co., Ltd.
   - Polyone Corporation
   - Polymastics Co Ltd
   - Quadrant AG
   - RTP Company
   - SABIC Innovative Plastics
   - Toyobo Co Ltd

5. Key Business and Product Trends
   - Industry’s first PPS resin particles for powder bed fusion 3D printing developed by Toray
   - Production Capacity of Polymastics’ Facility in Malaysia Increased by 9,000 Tons
   - Polyphenylene Sulfide Fiber TORCON™ and Polyacrylonitrile-base Flame Resistant Yarn Utilized to Develop High Performance Flame Shielding Paper
   - Launch of Celanese® PPS Grades in Japan
   - Strategic Alliance with NHU Reinforces the High Performance Engineering Plastics Portfolio of DSM
   - Development of the Polimotor 2 All-Plastic Automotive Engine by Solvay
   - SK Chemicals and INITZ to Exhibit Super Engineering Plastics at Chinaplas 2015
- Construction of New Production Line to Broaden DIC's PPS Polymer Production Capacity
- Ryton® PPS Acquired by Solvay
- First Supply Deal of SK Chemicals with a Major International Company for Super Engineering Plastic Materials
- Launch of Two Novel Grades of Ryton® PPS for Food Contact Applications
- Establishment of DIC Corporation's First PPS Compounds Facility in the PRC
- Broadening of Celanese's Kentucky Compounding Production Facility
- Celanese to Expand Compounding Capabilities at Nanjing Integrated Chemical Complex
- Development of Halogen-free Fortron® PPS CESS0 for Consumer Electronics Device Housings
- Use of Celanese's Fortron ICE PPS in Making Allied Series VX-Mid™ HT UHF RFID Tag
- Commercial Release of Xtel® PPS Alloys under the Ryton® PPS Brand Name
- Use of Celanese's Fortron PPS in Making Ice Protection Plates and in Aircraft Window Frame Production Process
- Celanese Presents New Bomat Profitherm Heat Exchanger with Fortron® PPS at K 2013
- Celanese Offers Fortron® PPS for Use in Automotive Head-Up Displays for Safe Driving
- HCL Replaces Conventional PEEK Cable Ties for Oil and Gas Pipelines with Fortron® PPS
- Development of New Sealing Shim and Flange by KACO Using Celanese's Fortron® PPS
- Klopman Relies on Fortron® PPS Fibers from Celanese to Make the New Sungrazer 180 Fabric for PPE Clothing
- Plans to Set up Toray's First Manufacturing Base for PPS Resin outside Japan
- ALBIS Plastic and Toray Form Torelina® PPS Distribution Pact
- Lion Idemitsu Composites Acquires Idemitsu Kosan's PPS Business
- Use of Celanese's Fortron® FX4382T1 PPS in Food Handling Applications
- New Bi-Component PPS Felt Media for Coal-Fired Boilers Launched by GE
- Implementation of Hot Water Systems for Molding Fortron PPS Deliver Exceptional Heat Transfer Performance
- Teijin Chemicals Signs Collaborative Agreement with SK Chemicals
- Fortron Industries Celebrates 20th Anniversary with an Overall PPS Production of 230 Million Pounds
- Chevron Philips Chemical Celebrates 40th Anniversary of Ryton® PPS
- Construction of Toray's Third Compounding Facility in China
- Chrysler Relies on Molded Plastic Transmission Accumulator Piston Made Using Ryton PPS
- DIC to Build New PPS Polymer Production Line to Expand its Overall Production Capacity
- Fortron Industries to Enhance PPS Production at Wilmington Plant

6. Global Market Overview
6.1 Market Overview by Product Type
6.1.1 Product Type Market Overview by Geographic Region
6.1.1.1 PPS Compounds
6.1.1.2 Other PPS Products
6.2 Market Overview by End-Use Application
6.2.1 End-Use Application Market Overview by Geographic Region
6.2.1.1 Automotive Applications
6.2.1.2 Electrical & Electronic Applications
6.2.1.3 Industrial Applications
6.2.1.4 Other End-Use Applications
6.3 Global Polyphenylene Sulfide (PPS) Consumption on Neat Resin Basis
6.3.1 Global Polyphenylene Sulfide (PPS) Consumption by Product Type on Neat Resin Basis
6.3.2 Global Polyphenylene Sulfide (PPS) Consumption by Geographic Region on Neat Resin Basis
6.3.2.1 Global Regional Polyphenylene Sulfide (PPS) Consumption by Product Type on Neat Resin Basis
6.3.2.1.1 North America
6.3.2.1.2 Europe
6.3.2.1.3 Asia-Pacific
6.3.2.1.4 Rest of World

PART B: Regional Market Perspective

Regional Market Overview

1. North America
1.1 North American Market Overview by Product Type
1.2 North American Market Overview by Region
1.3 North American Market Overview by End-use Application
1.4 Major Market Players
1.5 North American Market Overview by Country
1.5.1 The United States
1.5.2 Rest of North America

2. EUROPE
2.1 European Market Overview by Product Type
2.2 European Market Overview by Region
2.3 European Market Overview by End-use Application
2.4 Major Market Players
- ALBIS Plastic GmbH (Germany)
- Centroplast Engineering Plastics GmbH (Germany)
- Ensinger GmbH (Germany)
- Eurostar Engineering Plastics (France)
- Grupo Repol (Spain)
- LATI Industria Termoplastici SPA (Italy)
- Lehmann & Voss & Co (Germany)
- Murtfeldt Kunststoffe GmbH & Co KG (Germany)
- Quadrant AG (Switzerland)

3. ASIA-PACIFIC
3.1 Asia-Pacific Market Overview by Product Type
3.2 Asia-Pacific Market Overview by Region
3.3 Asia-Pacific Market Overview by End-use Application
3.4 Major Market Players
- Chengdu Letian Plastics Co Ltd (China)
- China Lumena New Materials Corp (China)
- DIC Corporation (Japan)
- Dunhuang Western Region Special New Material Co Ltd (China)
- Haohua Honghe Chemical Co Ltd (China)
- Kotec Corporation (Japan)
- Kureha Corporation (Japan)
- LG Chem (South Korea)
- Lion Idemitsu Composites Co., Ltd. (Japan)
- Polyplastics Co Ltd (Japan)
- Samsung SDI Co Ltd (South Korea)
- SK Chemicals Co Ltd (INITZ) (South Korea)
- Toray Industries, Inc. (Japan)
- Tosoh Corporation (Japan)
- Toyobo Co Ltd (Japan)
- Zhejiang NHU Special Materials Co Ltd (China)

3.5 Asia-Pacific Market Overview by Country
3.5.1 China
3.5.2 Japan
3.5.3 South Korea
3.5.4 Rest of Asia-Pacific

4. Rest Of World
4.1 Rest of World Market Overview by Product Type
4.2 Rest of World Market Overview by End-use Application

PART C: Guide To The Industry

1. North America
PART D: Annexure

1. RESEARCH METHODOLOGY
2. FEEDBACK

List of Charts & Graphs

PART A: Global Market Perspective

Chart 1: Global Polyphenylene Sulfide (PPS) Market Overview (2012, 2016 & 2020) by End-Use Application in '000 Metric Tons
Chart 2: Global Market for Polyphenylene Sulfide (PPS) in Automotive Applications (2012, 2016 & 2020) by Geographic Region in '000 Metric Tons
Chart 3: Global Market for Polyphenylene Sulfide (PPS) in Electrical & Electronic Applications (2012, 2016 & 2020) by Geographic Region in '000 Metric Tons
Chart 4: Global Market for Polyphenylene Sulfide (PPS) in Industrial Applications (2012, 2016 & 2020) by Geographic Region in '000 Metric Tons
Chart 5: Global Market for Polyphenylene Sulfide (PPS) in Other Applications (2012, 2016 & 2020) by Geographic Region in '000 Metric Tons
Chart 6: Global Polyphenylene Sulfide (PPS) Installed Capacities by Country in Metric Tons
Chart 7: Global Polyphenylene Sulfide (PPS) Installed Capacities by Manufacturer and Country in Metric Tons
Chart 8: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) in Volume ('000 Metric Tons) and Value (USD Million)
Chart 9: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Product Type - PPS Compounds and Other PPS in '000 Metric Tons
Chart 10: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Volume Market Share (%) by Type - PPS Compounds and Other PPS
Chart 11: Global Polyphenylene Sulfide (PPS) Compounds Market Analysis (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in '000 Metric Tons
Chart 12: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Compounds Volume Market Share (%) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
Chart 13: Global Other Polyphenylene Sulfide (PPS) Products Market Analysis (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in '000 Metric Tons
Chart 14: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Product Type Volume Market Share (%) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
Chart 15: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-Use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons
Chart 16: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-Use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 17: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-Use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 18: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Value Market Share (%) by End-Use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 19: Global Market for Polyphenylene Sulfide (PPS) in Automotive Applications (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in '000 Metric Tons
Chart 20: Glance at 2012, 2017 and 2022 Global Volume Market Share (%) of Polyphenylene Sulfide (PPS) in Automotive Applications by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
Chart 21: Global Market for Polyphenylene Sulfide (PPS) in Automotive Applications (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in USD Million
Chart 22: Glance at 2012, 2017 and 2022 Global Value Market Share (%) of Polyphenylene Sulfide (PPS) in Automotive Applications by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
Chart 23: Global Market for Polyphenylene Sulfide (PPS) in Electrical & Electronic Applications (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in '000 Metric Tons
Chart 24: Glance at 2012, 2017 and 2022 Global Volume Market Share (%) of Polyphenylene Sulfide (PPS) in Electrical & Electronic Applications by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
Chart 25: Global Market for Polyphenylene Sulfide (PPS) in Electrical & Electronic Applications (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in USD Million
Chart 26: Glance at 2012, 2017 and 2022 Global Value Market Share (%) of Polyphenylene Sulfide (PPS) in Electrical & Electronic Applications by Geographic Region - North America, Europe, Asia-Pacific and Rest of World
PART B: Regional Market Perspective

Chart 48: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World

Chart 49: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Volume Market Share (%) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World

Chart 50: Global Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World in USD Million

Chart 51: Glance at 2012, 2017 and 2022 Global Polyphenylene Sulfide (PPS) Value Market Share (%) by Geographic Region - North America, Europe, Asia-Pacific and Rest of World

Regional Market Overview

North America

Chart 52: North American Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) in Volume ('000 Metric Tons) and Value (USD Million)

Chart 53: North American Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Product Type - PPS Compounds and Other PPS in '000 Metric Tons
The United States

Chart 63: United States Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons
Chart 64: Glance at 2012, 2017 and 2022 United States Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 65: United States Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 66: Glance at 2012, 2017 and 2022 United States Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Rest of North America

Chart 67: Rest of North America Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons
Chart 68: Glance at 2012, 2017 and 2022 Rest of North America Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 69: Rest of North America Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 70: Glance at 2012, 2017 and 2022 Rest of North America Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Europe

Chart 71: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) in Volume ('000 Metric Tons) and Value (USD Million)
Chart 72: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Product Type - PPS Compounds and Other PPS in '000 Metric Tons
Chart 73: Glance at 2012, 2017 and 2022 European Polyphenylene Sulfide (PPS) Volume Market Share (%) by Type - PPS Compounds and Other PPS
Chart 74: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Region - France, Germany, Italy, Spain, United Kingdom and Rest of Europe in '000 Metric Tons
Chart 75: Glance at 2012, 2017 and 2022 European Polyphenylene Sulfide (PPS) Volume Market Share (%) by Region - France, Germany, Italy, Spain, United Kingdom and Rest of Europe
Chart 76: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Region - France, Germany, Italy, Spain, United Kingdom and Rest of Europe in USD Million
Chart 77: Glance at 2012, 2017 and 2022 European Polyphenylene Sulfide (PPS) Value Market Share (%) by Region - France, Germany, Italy, Spain, United Kingdom and Rest of Europe
Chart 78: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons
Chart 79: Glance at 2012, 2017 and 2022 European Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 80: European Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 81: Glance at 2012, 2017 and 2022 European Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Asia-Pacific

Chart 82: Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) in Volume (’000 Metric Tons) and Value (USD Million)
Chart 83: Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Product Type - PPS Compounds and Other PPS in ’000 Metric Tons
Chart 84: Glance at 2012, 2017 and 2022 Asia-Pacific Polyphenylene Sulfide (PPS) Volume Market Share (%) by Type - PPS Compounds and Other PPS
Chart 85: Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Region - China, Japan, South Korea and Rest of Asia-Pacific in ’000 Metric Tons
Chart 86: Glance at 2012, 2017 and 2022 Asia-Pacific Polyphenylene Sulfide (PPS) Volume Market Share (%) by Region - China, Japan, South Korea and Rest of Asia-Pacific
Chart 87: Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Region - China, Japan, South Korea and Rest of Asia-Pacific in USD Million
Chart 88: Glance at 2012, 2017 and 2022 Asia-Pacific Polyphenylene Sulfide (PPS) Value Market Share (%) by Region - China, Japan, South Korea and Rest of Asia-Pacific

China

Chart 93: Chinese Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in ’000 Metric Tons
Chart 94: Glance at 2012, 2017 and 2022 Chinese Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 95: Chinese Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 96: Glance at 2012, 2017 and 2022 Chinese Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Japan

Chart 97: Japanese Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in ’000 Metric Tons
Chart 99: Japanese Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 100: Glance at 2012, 2017 and 2022 Japanese Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

South Korea

Chart 101: South Korean Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in ’000 Metric Tons
Chart 102: Glance at 2012, 2017 and 2022 South Korean Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications
Chart 103: South Korean Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million
Chart 104: Glance at 2012, 2017 and 2022 South Korean Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Rest of Asia-Pacific
Chart 105: Rest of Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons

Chart 106: Glance at 2012, 2017 and 2022 Rest of Asia-Pacific Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Chart 107: Rest of Asia-Pacific Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million

Chart 108: Glance at 2012, 2017 and 2022 Rest of Asia-Pacific Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Chart 109: Rest of World Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) in Volume ('000 Metric Tons) and Value (USD Million)

Chart 110: Rest of World Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by Product Type - PPS Compounds and Other PPS

Chart 111: Glance at 2012, 2017 and 2022 Rest of World Polyphenylene Sulfide (PPS) Volume Market Share (%) by Type - PPS Compounds and Other PPS

Chart 112: Rest of World Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in '000 Metric Tons

Chart 113: Glance at 2012, 2017 and 2022 Rest of World Polyphenylene Sulfide (PPS) Volume Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

Chart 114: Rest of World Polyphenylene Sulfide (PPS) Market Analysis (2012-2022) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications in USD Million

Chart 115: Glance at 2012, 2017 and 2022 Rest of World Polyphenylene Sulfide (PPS) Value Market Share (%) by End-use Application - Automotive, Electricals & Electronics, Industrial and Other Applications

List of Figures

Figure 1: Polyphenylene Sulfide (PPS) Chemical Formula
Figure 2: Plastics Performance Pyramid
Figure 3: Comparison of Cross-Linked and Linear PPS

List of Tables

Table 1: Performance Properties of PPS
Table 2: Comparison of Performance Properties of Select Commercial 40% Glass Fiber Filled PPS Grades
Table 3: Thermal Properties of Select High Performance Plastics
Table 4: Comparison of Storage Modulus (E') Between Cross-Linked and Linear PPS
Table 5: Global Hybrid and Electric Vehicle Sales (2011-2015) by Region - Asia-Pacific, Europe, North America and Rest of World in Units
Table 6: Global Battery Electric Vehicle (BEV) Sales (2011-2015) by Region - Asia-Pacific, Europe, North America and Rest of World
Table 7: Global Plug-in Hybrid Electric Vehicle (PHEV) Sales (2011-2015) by Region - Asia-Pacific, Europe, North America and Rest of World
Table 8: Global Hybrid Electric Vehicle (HEV) Sales (2011-2015) by Region - Asia-Pacific, Europe, North America and Rest of World
Table 9: History of PPS Industry - 1973-2000
Table 10: History of PPS Industry - 2001-2015

Ordering:

Order Online - [http://www.researchandmarkets.com/reports/3619363/](http://www.researchandmarkets.com/reports/3619363/)

Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit

http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Polyphenylene Sulfide (PPS) - A Global Market Overview
Web Address: http://www.researchandmarkets.com/reports/3619363/
Office Code: SCBRXZ9S

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Product Format</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic (PDF) - Single User</td>
<td></td>
<td>USD 3960</td>
</tr>
<tr>
<td>Electronic (PDF) - Enterprisewide</td>
<td></td>
<td>USD 5760</td>
</tr>
</tbody>
</table>

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title:  
Mr [ ] Mrs [ ] Dr [ ] Miss [ ] Ms [ ] Prof [ ]
  
First Name: ___________________________  Last Name: ___________________________

Email Address: * ___________________________

Job Title: ___________________________

Organisation: ___________________________

Address: __________________________________________

City: ___________________________

Postal / Zip Code: ___________________________

Country: ___________________________

Phone Number: ___________________________

Fax Number: ___________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Account number</th>
<th>833 130 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: ______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp