

Photoresist and Photoresist Ancillaries Market Report by Photoresist Type (ArF Immersion, KrF, ArF Dry, gand i-line), Photoresist Ancillaries Type (Anti-Reflective Coatings, Remover, Developer, and Others), Application (Semiconductors & ICS, LCDs, Printed Circuit Boards, and Others), and Region 2024-2032

https://marketpublishers.com/r/P4F3CCDF8D83EN.html

Date: March 2024 Pages: 142 Price: US\$ 3,899.00 (Single User License) ID: P4F3CCDF8D83EN

# **Abstracts**

The global photoresist and photoresist ancillaries market size reached US\$ 3.9 Billion in 2023. Looking forward, IMARC Group expects the market to reach US\$ 5.7 Billion by 2032, exhibiting a growth rate (CAGR) of 4% during 2024-2032. The increasing demand for consumer electronics, continual technological advancements in semiconductor manufacturing and the emerging trend of device miniaturization represent some of the key factors driving the market.

The Increasing Demand for Consumer Electronic Devices is Accelerating the Market Growth

The photoresist and photoresist ancillaries market has been experiencing continuous growth. With the rise in demand for advanced electronic devices, there is a concurrent increase in demand for semiconductors. Photoresist and ancillaries is a critical component in the semiconductor manufacturing process, particularly in the production of microchips that power these devices. As a result, the demand for photoresist and ancillaries is expected to continue to rise in response to the increasing demand for smartphones, laptops, tablets, and other electronic devices, which is driving the growth of the market.

Competitive analysis such as market structure, market share by key players, player



positioning, top winning strategies, competitive dashboard, and company evaluation quadrant has been covered in the report. Also, detailed profiles of all major companies have been provided. The market structure is concentrated with a small number of key players having majority of the share in the market. The volume of new entrants is low in the photoresist and photoresist ancillaries industry due to the high product differentiation, low number of raw material suppliers, and high initial investment.

What are Photoresist and Photoresist Ancillaries?

A photoresist is a light-sensitive material that undergoes a chemical change when exposed to light during the process of photolithography, which is a technique for creating patterns on a substrate, typically a silicon wafer. Depending on the chemistry of the resist, it can either be positive or negative. Photoresist ancillaries include adhesion promoters, edge bead removers, primers, and antireflective coatings, which are used in conjunction with photoresists to improve their performance or facilitate photolithography. Upon exposure to light, photoresist materials undergo a chemical change, and can be dissolved in a developer solution to reveal the patterned substrate. In order to create microelectronic devices, MEMS, or other microstructures, photoresists are used to create patterns on a substrate, while edge bead removers are used to remove excess photoresist from the substrate edges that can interfere with subsequent processing processes.

#### COVID-19 Impact:

The COVID-19 pandemic outbreak has caused a severe problem for the photoresist and photoresist ancillaries industry and imposed unprecedented challenges on numerous aspects. With regards to the imports of major raw materials required for manufacturing, the global crisis has resulted in challenges in obtaining necessary raw materials. Supply chains were impacted due to lockdown measures, with temporary production halts causing project delays and process disruptions. Logistics providers faced challenges in transporting goods, particularly across borders as well as manufacturers faced component shortages. However, the global market has been growing at a stable rate post-pandemic, and major companies have adjusted their production facilities in compliance with government directives to meet product demand.

Photoresist and Photoresist Ancillaries Market Trends:

The photoresist and photoresist ancillaries market is primarily driven by the widespread usage in flat-panel displays and consumer electronics. This can be attributed to the



continual technological advancements in the manufacturing of electrical and electronics devices. Additionally, the growing trend of miniaturization of electronic devices leading to an increased demand for photoresists and ancillaries for the manufacturing of smaller and more efficient semiconductors and ICs is providing an impetus to the market. The rising usage of the Internet of Things (IoT) resulting in IoT devices requiring advanced semiconductors and ICs is also creating lucrative opportunities in the market. The market is further driven by the numerous innovations in the manufacturing of medical devices and equipment. Apart from this, the augmenting demand for renewable energy technologies, such as solar panels, leading to the rapid utilization of photoresist and photoresist ancillaries in the production of solar cells is also fueling the market. Furthermore, numerous strategies such as merger and acquisitions (M&As), partnerships and collaborations conducted by key players to enhance their geographical presence are also acting as a significant growth-inducing factor. Some of the other factors contributing to the market include rapid urbanization and industrialization, inflating disposable income levels, the advent of autonomous and connected vehicles, and extensive research and development (R&D) activities.

Key Market Segmentation:

IMARC Group provides an analysis of the key trends in each segment of the global photoresist and photoresist ancillaries market report, along with forecasts at the global and regional levels from 2024-2032. Our report has categorized the market based on photoresist type, photoresist ancillaries type, and application.

Photoresist Type Insights:

ArF Immersion KrF ArF Dry g- and i-line

The report has provided a detailed breakup and analysis of the photoresist and photoresist ancillaries market based on the photoresist type. This includes ArF Immersion, KrF, ArF Dry and g- and i-line. According to the report, KrF represented the largest segment due to the continual technological advancements in resolution enhancement techniques, such as offaxis illumination, proximity correction and phaseshifting mask. In addition, the demand for KrF has been largely influenced by the escalating demand for high thermal stability, ion implantation resistance, plasma etching, long-term stability and wide thickness coverage in the manufacturing of



electronic products.

Photoresist Ancillaries Type Insights:

Anti-Reflective Coatings Remover Developer Others

A detailed breakup and analysis of the photoresist and photoresist ancillaries market based on the photoresist ancillaries type has also been provided in the report. This antireflective coatings, remover, developer, and others. According to the report, antireflective coatings accounted for the largest market share, due to the growing demand for electronic devices resulting in a corresponding increase in demand for anti-reflective coatings to enhance the performance and durability of display screens. Moreover, with the growing demand for renewable energy sources, the demand for anti-reflective coatings in the solar energy industry is expected to rise.

**Application Insights:** 

Semiconductors & ICS LCDs Printed Circuit Boards Others

A detailed breakup and analysis of the photoresist and photoresist ancillaries market based on the application has also been provided in the report. This includes semiconductors & ICS, LCDs, printed circuit boards, and others. According to the report, semiconductors & ICS accounted for the largest market share on account of the introduction of improved resolution of the photolithographic process and higher computing power at lower prices. In addition, the rapid expansion of the automotive industry resulting in the advent of connected and autonomous vehicles requiring more sophisticated semiconductors and ICs is fueling the segment growth.

**Regional Insights:** 

Asia Pacific North America Europe

Photoresist and Photoresist Ancillaries Market Report by Photoresist Type (ArF Immersion, KrF, ArF Dry, g- and...



Middle East and Africa Latin America

The report has also provided a comprehensive analysis of all the major regional markets, which include Asia Pacific, North America, Europe, the Middle East and Africa and Latin America. According to the report, Asia Pacific was the largest market for photoresist and photoresist ancillaries. Some of the factors driving the Asia Pacific photoresist and photoresist ancillaries market included the presence of several key players, emerging trend of device miniaturization, advent of autonomous and connected vehicles due to the rapid expansion of automotive industry and a higher uptake of consumer electronic devices.

Competitive Landscape:

The report has also provided a comprehensive analysis of the competitive landscape in the global photoresist and photoresist ancillaries market. Some of the companies covered in the report include:

Tokyo Ohka Kogyo Co., Ltd. JSR Corporation DuPont de Nemours Inc. Shin-Etsu Chemical Co. Ltd. Fujifilm Electronics Materials Co., Ltd. Sumitomo Chemical Co., Ltd. Merck Az Electronics Materials Allresist GmbH Avantor Performance Materials, LLC Microchemicals GmbH

Please note that this only represents a partial list of companies, and the complete list has been provided in the report.

Key Questions Answered in This Report

1. How big is the global photoresist and photoresist ancillaries market?

2. What is the expected growth rate of the global photoresist and photoresist ancillaries market during 2024-2032?

3. What are the key factors driving the global photoresist and photoresist ancillaries market?



4. What has been the impact of COVID-19 on the global photoresist and photoresist ancillaries market?

5. What is the breakup of the global I photoresist and photoresist ancillaries market based on the photoresist type?

6. What is the breakup of the global photoresist and photoresist ancillaries market based on the photoresist ancillaries type?

7. What is the breakup of the global photoresist and photoresist ancillaries market based on the application?

8. What are the key regions in the global photoresist and photoresist ancillaries market?

9. Who are the key players/companies in the global photoresist and photoresist ancillaries market?



# Contents

#### **1 PREFACE**

### **2 SCOPE AND METHODOLOGY**

- 2.1 Objectives of the Study
- 2.2 Stakeholders
- 2.3 Data Sources
- 2.3.1 Primary Sources
- 2.3.2 Secondary Sources
- 2.4 Market Estimation
- 2.4.1 Bottom-Up Approach
- 2.4.2 Top-Down Approach
- 2.5 Forecasting Methodology

#### **3 EXECUTIVE SUMMARY**

#### **4 INTRODUCTION**

- 4.1 Overview
- 4.2 Key Industry Trends

## **5 GLOBAL PHOTORESIST AND PHOTORESIST ANCILLARIES MARKET**

- 5.1 Market Overview
- 5.2 Market Performance
- 5.3 Impact of COVID-19
- 5.4 Price Analysis
- 5.5 Market Breakup by Photoresist Type
- 5.6 Market Breakup by Photoresist Ancillaries Type
- 5.7 Market Breakup by Application
- 5.8 Market Breakup by Region
- 5.9 Market Forecast
- 5.10 SWOT Analysis
  - 5.10.1 Overview
  - 5.10.2 Strengths
  - 5.10.3 Weaknesses
  - 5.10.4 Opportunities



- 5.10.5 Threats
- 5.11 Value Chain Analysis
- 5.11.1 Overview
- 5.11.2 Research and Development
- 5.11.3 Raw Material Procurement
- 5.11.4 Manufacturing
- 5.11.5 Marketing
- 5.11.6 Distribution
- 5.11.7 End-Use
- 5.12 Porters Five Forces Analysis
  - 5.12.1 Overview
  - 5.12.2 Bargaining Power of Buyers
  - 5.12.3 Bargaining Power of Suppliers
  - 5.12.4 Degree of Competition
  - 5.12.5 Threat of New Entrants
  - 5.12.6 Threat of Substitutes

# 6 PHOTORESIST MARKET BREAKUP BY TYPE

6.1 ArF Immersion6.1.1 Market Trends

- 6.1.2 Market Forecast
- 6.2 KrF
  - 6.2.1 Market Trends
  - 6.2.2 Market Forecast
- 6.3 ArF Dry
- 6.3.1 Market Trends
- 6.3.2 Market Forecast
- 6.4 g- and i-line
  - 6.4.1 Market Trends
  - 6.4.2 Market Forecast

## 7 PHOTORESIST ANCILLARIES MARKET BREAKUP BY TYPE

7.1 Anti-Reflective Coatings
7.1.1 Market Trends
7.1.2 Market Forecast
7.2 Remover
7.2.1 Market Trends



7.2.2 Market Forecast
7.3 Developer
7.3.1 Market Trends
7.3.2 Market Forecast
7.4 Others
7.4.1 Market Trends
7.4.2 Market Forecast

# 8 PHOTORESIST AND PHOTORESIST ANCILLARIES MARKET: BREAKUP BY APPLICATION

8.1 Semiconductors & ICS8.1.1 Market Trends8.1.2 Market Forecast

- 8.1.2 Market Fored
- 8.2 LCDs
  - 8.2.1 Market Trends
- 8.2.2 Market Forecast
- 8.3 Printed Circuit Boards
  - 8.3.1 Market Trends
  - 8.3.2 Market Forecast
- 8.4 Others
  - 8.4.1 Market Trends
  - 8.4.2 Market Forecast

# 9 MARKET BREAKUP BY REGION

- 9.1 Asia Pacific
- 9.1.1 Market Trends
- 9.1.2 Market Forecast
- 9.2 North America
- 9.2.1 Market Trends
- 9.2.2 Market Forecast
- 9.3 Europe
- 9.3.1 Market Trends
- 9.3.2 Market Forecast
- 9.4 Middle East and Africa
  - 9.4.1 Market Trends
- 9.4.2 Market Forecast
- 9.5 Latin America

Photoresist and Photoresist Ancillaries Market Report by Photoresist Type (ArF Immersion, KrF, ArF Dry, g- and...



9.5.1 Market Trends

9.5.2 Market Forecast

## **10 MANUFACTURING PROCESS**

- 10.1 Product Overview
- 10.2 Raw Material Requirements
- 10.3 Manufacturing Process
- 10.4 Key Success and Risk Factors

# **11 COMPETITIVE LANDSCAPE**

- 11.1 Market Structure
- 11.2 Key Players
- 11.3 Profiles of Key Players
  - 11.3.1 Tokyo Ohka Kogyo Co., Ltd.
  - 11.3.2 JSR Corporation
  - 11.3.3 DuPont de Nemours Inc.
  - 11.3.4 Shin-Etsu Chemical Co. Ltd.
  - 11.3.5 Fujifilm Electronics Materials Co., Ltd.
  - 11.3.6 Sumitomo Chemical Co., Ltd.
  - 11.3.7 Merck Az Electronics Materials
  - 11.3.8 Allresist GmbH
  - 11.3.9 Avantor Performance Materials, LLC
  - 11.3.10 Microchemicals GmbH



# **List Of Tables**

#### LIST OF TABLES

Table 1: Global: Photoresist and Photoresist Ancillaries Market: Key Industry Highlights, 2023 and 2032

Table 2: Global: Photoresist Market Forecast: Breakup by Type (in Million US\$), 2024-2032

Table 3: Global: Photoresist Ancillaries Market Forecast: Breakup by Type (in Million US\$), 2024-2032

Table 4: Global: Photoresist and Photoresist Ancillaries Market Forecast: Breakup by Application (in Million US\$), 2024-2032

Table 5: Global: Photoresist and Photoresist Ancillaries Market Forecast: Breakup by Region (in Million US\$), 2024-2032

Table 6: Global: Photoresist and Photoresist Ancillaries Market: Competitive StructureTable 7: Global: Photoresist and Photoresist Ancillaries Market: Key Players



# **List Of Figures**

#### **LIST OF FIGURES**

Figure 1: Global: Photoresist and Photoresist Ancillaries Market: Major Drivers and Challenges Figure 2: Global: Photoresist and Photoresist Ancillaries Market: Sales Value (in Billion US\$), 2018-2023 Figure 3: Global: Photoresist Market: Breakup by Type (in %), 2023 Figure 4: Global: Photoresist Ancillaries Market: Breakup by Type (in %), 2023 Figure 5: Global: Photoresist and Photoresist Ancillaries Market: Breakup by Application (in %), 2023 Figure 6: Global: Photoresist and Photoresist Ancillaries Market: Breakup by Region (in %), 2023 Figure 7: Global: Photoresist and Photoresist Ancillaries Market Forecast: Sales Value (in Billion US\$), 2024-2032 Figure 8: Global: Photoresist and Photoresist Ancillaries Industry: SWOT Analysis Figure 9: Global: Photoresist and Photoresist Ancillaries Industry: Value Chain Analysis Figure 10: Global: Photoresist and Photoresist Ancillaries Industry: Porter's Five Forces Analysis Figure 11: Global: Photoresist (ArF Immersion) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 12: Global: Photoresist (ArF Immersion) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 13: Global: Photoresist (KrF) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 14: Global: Photoresist (KrF) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 15: Global: Photoresist (ArF Dry) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 16: Global: Photoresist (ArF Dry) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 17: Global: Photoresist (g- and i-line) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 18: Global: Photoresist (g- and i-line) Market Forecast: Sales Value (in Million US\$), 2024-2032 Figure 19: Global: Photoresist Ancillaries (Anti-Reflective Coatings) Market: Sales Value (in Million US\$), 2018 & 2023 Figure 20: Global: Photoresist Ancillaries (Anti-Reflective Coatings) Market Forecast: Sales Value (in Million US\$), 2024-2032



Figure 21: Global: Photoresist Ancillaries (Remover) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 22: Global: Photoresist Ancillaries (Remover) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 23: Global: Photoresist Ancillaries (Developer) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 24: Global: Photoresist Ancillaries (Developer) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 25: Global: Photoresist Ancillaries (Other Types) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 26: Global: Photoresist Ancillaries (Other Types) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 27: Global: Photoresist and Photoresist Ancillaries (Applications in

Semiconductors & ICS) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 28: Global: Photoresist and Photoresist Ancillaries (Applications in

Semiconductors & ICS) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 29: Global: Photoresist and Photoresist Ancillaries (Applications in LCDs)

Market: Sales Value (in Million US\$), 2018 & 2023

Figure 30: Global: Photoresist and Photoresist Ancillaries (Applications in LCDs) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 31: Global: Photoresist and Photoresist Ancillaries (Applications in Printed Circuit Boards) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 32: Global: Photoresist and Photoresist Ancillaries (Applications in Printed Circuit Boards) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 33: Global: Photoresist and Photoresist Ancillaries (Other Applications) Market: Sales Value (in Million US\$), 2018 & 2023

Figure 34: Global: Photoresist and Photoresist Ancillaries (Other Applications) Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 35: Asia Pacific: Photoresist and Photoresist Ancillaries Market: Sales Value (in Million US\$), 2018 & 2023

Figure 36: Asia Pacific: Photoresist and Photoresist Ancillaries Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 37: North America: Photoresist and Photoresist Ancillaries Market: Sales Value (in Million US\$), 2018 & 2023

Figure 38: North America: Photoresist and Photoresist Ancillaries Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 39: Europe: Photoresist and Photoresist Ancillaries Market: Sales Value (in Million US\$), 2018 & 2023

Figure 40: Europe: Photoresist and Photoresist Ancillaries Market Forecast: Sales



Value (in Million US\$), 2024-2032

Figure 41: Middle East and Africa: Photoresist and Photoresist Ancillaries Market: Sales Value (in Million US\$), 2018 & 2023

Figure 42: Middle East and Africa: Photoresist and Photoresist Ancillaries Market Forecast: Sales Value (in Million US\$), 2024-2032

Figure 43: Latin America: Photoresist and Photoresist Ancillaries Market: Sales Value (in Million US\$), 2018 & 2023

Figure 44: Latin America: Photoresist and Photoresist Ancillaries Market Forecast: Sales Value (in Million US\$), 2024-2032



#### I would like to order

Product name: Photoresist and Photoresist Ancillaries Market Report by Photoresist Type (ArF Immersion, KrF, ArF Dry, g- and i-line), Photoresist Ancillaries Type (Anti-Reflective Coatings, Remover, Developer, and Others), Application (Semiconductors & ICS, LCDs, Printed Circuit Boards, and Others), and Region 2024-2032

Product link: https://marketpublishers.com/r/P4F3CCDF8D83EN.html

Price: US\$ 3,899.00 (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 <u>https://marketpublishers.com/r/P4F3CCDF8D83EN.html</u>

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

First name: 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 <u>https://marketpublishers.com/docs/terms.html</u>



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