

Photoresist Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> ****Industry:**** Electronic Chemicals & Catalysts (Chemicals & Materials)
> ****Source:**** https://www.mordorintelligence.com/industry-reports/photoresist-market(https://www.mordorintelligence.com/industry-reports/photoresist-market)
> ****Scraped Date:**** 2026-09-17

Executive Market Summary

Market Metric	Details
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Base Market Size	USD 3.24 billion
Projected Forecast (2031)	USD 3.24 billion
Growth Rate (CAGR)	11.31 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

![Major players in Photoresist industry](images/chart_2.png)

![Photoresist Market (2026 - 2031)](images/chart_3.png)

![Photoresist Market: Market Share by Resist Type](images/chart_4.png)

![Photoresist Market: Market Share by End-User Industry](images/chart_5.png)

![Photoresist Market CAGR (%), Growth Rate by Region](images/chart_6.png)

![Photoresist Market Concentration](images/chart_7.png)

![footer background image](images/chart_10.png)

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![ESOMAR](images/chart_17.png)

![GPTW](images/chart_19.png)

Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview

Study Period | 2021 - 2031 |
Market Size (2026) | USD 3.24 Billion |
Market Size (2031) | USD 5.53 Billion |
Growth Rate (2026 - 2031) | 11.31 % |
Fastest Growing Market | North America |
Largest Market | Asia Pacific |
Market Concentration | High |
Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Photoresist Market Analysis by Mordor Intelligence
The Photoresist Market size is projected to be USD 2.91 billion in 2025, USD 3.24 billion in 2026, and reach USD 5.53 billion by 2031, growing at a CAGR of 11.31% from 2026 to 2031. Structural shifts underway in semiconductor manufacturing are amplifying demand: extreme-ultraviolet (EUV) lithography is moving from pilot lines to high-volume production, and government-backed fab-localization programs are redrawing supply chains for critical materials such as photoresist. Mature 193-nanometer ArF immersion formulations continue to anchor the cost-optimized nodes used in automotive microcontrollers, but next-generation metal-oxide dry resists are now essential at sub-5-nanometer logic, where photon shot noise and line-edge roughness threaten yield. Supply resilience considerations have also intensified as the U.S. and EU CHIPS Acts channel a significant amount into local wafer-fabrication capacity, compelling resist suppliers to duplicate blending and quality-assurance assets within North America and Europe.

Key Report Takeaways

- * By resist type, ArF immersion held 31.92% of the Photoresist market share in 2025, whereas EUV metal-oxide and dry resists are projected to expand at a 12.94% CAGR through 2031.
- * By tone, positive resists commanded 71.51% revenue share in 2025; negative resists post the fastest 11.38% CAGR to 2031.
- * By application, semiconductors and ICs accounted for 54.77% of the Photoresist market size in 2025, while advanced packaging is set to grow at a 11.95% CAGR through 2031.
- * By end-user industry, electronics and electricals accounted for 61.22% of the market size in 2025, while automotive and mobility are set to grow with the fastest CAGR of 11.86% through 2031.
- * By geography, the Asia-Pacific held the largest share of 72.34% of the market in 2025. However, North America is expected to witness the fastest growth at a CAGR of 11.49% during the forecast period.

Key Market Trends

Global Photoresist Market Trends and Insights Drivers Impact Analysis*

Drivers	(~) % Impact on CAGR Forecast	Geographic Relevance	Impact Timeline
Growing demand from semiconductor and AI accelerators	+3.2%	Global, with APAC core and North America acceleration	Medium term (2-4 years)
Accelerated EUV lithography adoption and High-NA roadmap	+2.8%	APAC (Taiwan, South Korea), North America (Intel fabs), Europe (IMEC pilot lines)	Long term (≥ 4 years)
5G/IoT proliferation expanding wafer starts	+1.9%	Global, with APAC manufacturing concentration	Medium term (2-4 years)
Government fab-incentive programs (US/EU Chips Acts)	+2.4%	North America, Europe, with supply-chain spillover to APAC	Long term (≥ 4 years)
Metal-oxide dry-deposited resists boosting EUV throughput	+1.0%	APAC leading-edge fabs, North America pilot lines	Long term (≥ 4 years)

Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The Photoresist market is consolidated. DuPont and Merck KGaA are widening portfolios via acquisition, bundling anti-reflective coatings, cleaning chemistries, and resists to simplify fabs' supply chains. Patent filings for metal-oxide form

ulations jumped in 2024-2025, with FUJIFILM and Sumitomo entering the race. Equipment vendors may forward-integrate further, a scenario that could commoditize standalone resist supply and compress supplier margins. Meanwhile, stringent solvent regulations are shrinking the viable vendor pool, amplifying the competitive moat for firms with compliance scale.

Photoresist Industry Leaders* TOKYO OHKA KOGYO CO., LTD.

- * JSR Corporation
- * FUJIFILM Corporation
- * Shin-Etsu Chemical Co., Ltd.
- * DuPont

* *Disclaimer: Major Players sorted in no particular order
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Scope Methodology P Space

For this methodology, the photoresist market covers the value of light sensitive resist materials sold for lithography and patterning steps used in semiconductor and related microfabrication workflows, counted at the point of sale by suppliers across end users and regions.

Scope exclusions: It excludes lithography tools and services, and it also excludes adjacent photoresist ancillaries such as developers, strippers, and anti reflective coatings when they are sold as separate product lines.

Segmentation Container

- * By Resist Type* ArF Immersion
- * ArF Dry
- * KrF
- * G-Line
- * I-Line
- * EUV Metal-Oxide and Dry Resists
- * Other Types
- * By Tone* Positive
- * Negative
- * By Application* Semiconductors and ICs
- * Advanced Packaging (Fan-Out WLP, RDL)
- * Flat-Panel Displays (LCD/OLED)
- * Printed Circuit Boards
- * MEMS and Sensors
- * Other Applications
- * By End-User Industry* Electronics and Electricals
- * Automotive and Mobility
- * Aerospace and Defense
- * Consumer Packaged Goods (Packaging)
- * Other Industries
- * By Geography* Asia-Pacific* China
- * Japan
- * South Korea
- * Taiwan
- * India
- * Rest of Asia-Pacific

- * North America* United States
- * Canada
- * Mexico
- * Europe* Germany
- * United Kingdom
- * France
- * Italy
- * Russia
- * Rest of Europe
- * South America* Brazil
- * Argentina
- * Rest of South America
- * Middle-East and Africa* Saudi Arabia
- * United Arab Emirates
- * South Africa
- * Rest of Middle-East and Africa

Frequently Asked Questions

What is the projected value of the photoresist market in 2031?

It is forecast to reach USD 5.53 billion by 2031, reflecting an 11.31% CAGR from USD 3.24 billion in 2026.

Which region is growing fastest for photoresists?

North America leads with an 11.49% CAGR, supported by CHIPS Act-funded fabs coming online after 2026.

Why are metal-oxide resists significant for future lithography?

They enable High-NA EUV patterning below 5 nm by offering higher photon absorption and better etch selectivity than organic chemistries.

How do environmental regulations affect resist suppliers?

New EPA and REACH rules on PFAS solvents and photo-acid generators force costly reformulation, favoring large vendors with compliance scale.

What factors drive photoresist demand in the automotive sector?

Electric-vehicle powertrain and ADAS chips increase lithography layers per car, pushing automotive resist demand toward an 11.86% CAGR.