

Zinc Oxide Market Revenues To Cross USD 9.0 Billion by 2033, Powder Form, Capturing 76.5% Share

Zinc Oxide Market size is expected to be worth around USD 9 billion by 2033, from USD 5.4 billion in 2023, growing at a CAGR of 5.8% from 2023 to 2033.

NEW YORK, NY, UNITED STATES, January 27, 2025 /EINPresswire.com/ --The global Zinc Oxide Market is poised for significant growth, driven by diverse applications across several key industries. Zinc oxide is a versatile compound with properties that make it essential in various manufacturing sectors. As an important material in the rubber industry, particularly in the automotive sector, zinc oxide is primarily used to aid in rubber processing and enhance the durability of rubber compounds. Beyond its critical role in rubber vulcanization, zinc oxide is extensively utilized in the ceramics industry to manufacture materials like glass and porcelain. Its



antibacterial properties also make it a valuable component in pharmaceuticals and cosmetics, particularly in products like diaper rash creams and mineral sunscreens.

Driving factors for the expansion of the zinc oxide market include technological advancements in manufacturing processes and a growing emphasis on sustainable and environmentally friendly practices. Innovations such as the development of nano-zinc oxide offer enhanced functionalities in products, including improved UV protection in skincare products and greater efficiency in electronic displays. Moreover, the tightening of global environmental regulations is propelling the adoption of zinc oxide as a safer alternative to harmful chemicals in various applications, thereby opening new avenues for market growth.

Another significant driver is the increasing awareness and demand for bio-based products. Zinc oxide is gaining traction in agricultural applications, where it is used to boost crop protection and nutrition, demonstrating its versatility and expanding its market reach. Additionally, the rise in the global middle-class population is contributing to a surge in consumer products, further bolstering the demand for zinc oxide in daily-use items.



Looking to the future, the zinc oxide market is expected to unveil substantial growth opportunities. The ongoing research and potential new applications in sectors like electronics and energy storage are promising. Zinc oxide's ability to function as a semiconductor material in solar cells and batteries is being explored, which could revolutionize energy sectors and

٢

The Asia Pacific (APAC) had the largest revenue share at over 52.2% in 2023." *Tajammul Pangarkar* contribute to the global shift towards renewable energy sources. Furthermore, the cosmetic industry continues to explore the benefits of zinc oxide in offering broader UV protection and addressing consumer demands for natural ingredients, which is likely to boost its use significantly.

0000000, 000000 00000: <u>https://market.us/report/zinc-oxide-market/free-sample/</u>

Key Takeaways

• The Zinc Oxide Market is projected to reach approximately USD 9 billion by 2033, up from USD 5.4 billion in 2023, reflecting a compound annual growth rate (CAGR) of 5.8%.

• The powder form of Zinc Oxide dominates the market, accounting for more than 76.5% of the share, followed by pellets and liquids. The market offers various grades, including standard, treated, USP, FCC, and specialized grades, catering to specific industrial standards and application needs.

• The automotive and chemicals sectors are the primary drivers of market growth, with the automotive industry holding over 40.5% of the market share, primarily due to Zinc Oxide's crucial role in tire manufacturing and other automotive components.

• The Asia Pacific (APAC) region leads the market with over 52.2% of the global revenue share in 2023, fueled by its significant manufacturing capabilities. North America follows with a 17.1% revenue share, largely driven by the demand from the cosmetics and pharmaceutical industries.

Zinc Oxide Top Trends

1. Nanoparticle Innovation: The development of zinc oxide nanoparticles is gaining traction, primarily because of their unique properties which include UV protection and antibacterial effects. These nanoparticles are increasingly used in products ranging from sunscreens to functional textiles, enhancing their efficacy and functionality.

2. Advanced Formulations in Cosmetics: Zinc oxide is becoming a staple in cosmetic formulations, not just for its sun-blocking capabilities but also for its role in products aimed at sensitive skin, anti-aging, and acne treatment. This is due to its anti-inflammatory properties.

3. Increased Use in Environmental Applications: The photocatalytic properties of zinc oxide are being leveraged more extensively for environmental cleanup, particularly in water and air purification technologies. This application helps in breaking down pollutants, making it crucial for sustainable environmental management.

4. Growth in Electronic Applications: There is a noticeable increase in the use of zinc oxide in the electronics industry, especially in the manufacturing of solar cells and flexible electronics. Its electrical properties make it suitable for energy-efficient applications.

5. Agricultural Innovations: Zinc oxide is also finding its way into the agricultural sector. Its use in crop protection and nutrition is emerging as a significant trend, with its ability to act against a range of microbial pathogens and enhance plant growth.

Key Market Segments

By Form

In 2023, the Zinc Oxide market was predominantly led by its powder form, capturing over 76.5% of the market share. Powdered Zinc Oxide is extensively utilized in various industries, including pigments, rubber manufacturing, ceramics, and pharmaceuticals, owing to its versatility and easy integration into diverse processes. Pellets, holding a smaller yet substantial market share of about 18.2%, are favored in applications requiring controlled release or specific shape adjustments, such as in chemical reactions. The liquid form, making up approximately 5.3% of the market, is preferred in specialized applications like coatings, paints, and certain pharmaceutical formulations where liquid dispersion is essential. The dominance of the powder form highlights its broad utility and adaptability across multiple industries, while pellets and liquid forms serve niche needs within their respective sectors.

By Grade

This baseline quality of Zinc Oxide is employed broadly across various industrial sectors. Treated grade within this category undergoes modifications such as surface treatments or chemical alterations to enhance its properties for specific applications. Complying with the United States Pharmacopeia (USP) standards, this high-purity grade is crucial for pharmaceutical applications where safety and purity are paramount. Meeting the Food Chemicals Codex (FCC) standards, this grade of Zinc Oxide is safe for food and beverage applications, ensuring compliance with industry regulations. Additional specialized grades cater to unique applications beyond the primary categories, offering targeted properties for specific industrial uses.

Application Analysis

In 2023, the automotive sector led the Zinc Oxide market with over 40.5% share, primarily used in rubber formulations for tires and other components due to its durability and performanceenhancing properties. The chemicals sector accounted for about 22.3% of the market share, using Zinc Oxide in various processes and production applications. Rubber was close behind at 18.7%, where Zinc Oxide's reinforcing properties are essential. Pharmaceuticals and ceramics contributed smaller yet significant shares of around 9.5% and 5.8%, respectively, with the remaining sectors including paints & coatings, cosmetics and personal care, and agriculture, each utilizing Zinc Oxide for tailored applications within their industries. The automotive industry's significant share underscores its extensive use of Zinc Oxide in rubber formulations, while the compound's versatility is evidenced by its application across sectors like chemicals, pharmaceuticals, ceramics, and more.

Key Market Segments List

By Process

- Wet Chemical
- Direct
- Indirect
- Other Processes
- Wet Chemical
- Direct
- Indirect
- Others

By Form

- Powder
- Pellets
- Liquid

By Grade

- Standard
- Treated
- USP
- FCC
- Others

By Application

- Chemicals
- Rubber
- Pharmaceuticals
- Ceramics
- Paints & Coatings
- Cosmetics and Personal Care
- Agriculture
- Other Applications

Regional Analysis

The Asia Pacific region dominated the global Zinc Oxide market with a 52.2% revenue share in 2023, propelled by its robust manufacturing base and the presence of key industries such as pharmaceuticals, rubber, and ceramics. The demand in the region is further boosted by the growing markets for skincare products and tire manufacturing, particularly in India and China.

China remains the largest producer and consumer of Zinc Oxide globally, driven by its expanding population, increasing urbanization, and rising disposable income. The demand for paints and coatings is expected to surge, supported by the expanding housing and construction sectors.

North America held a 17.1% revenue share in 2023, with the United States playing a pivotal role due to the presence of major industry players. The demand for Zinc Oxide in this region is expected to grow, particularly in the cosmetics and pharmaceutical sectors, influenced by the increasing geriatric population.

Regulations On the Zinc Oxide Market

1. Cosmetic Use in the EU and US: Zinc Oxide is approved for use as a UV filter in cosmetics in

both the EU and the US. In the EU, product labels must indicate if Zinc Oxide is present, especially if it's in a nano form, and advise against contact with eyes and keeping out of reach of children.

2. FDA Regulations: In the United States, the FDA specifies that Zinc Oxide can be safely used in cosmetics, including products intended for use around the eyes, as long as it adheres to good manufacturing practices. It's listed as a color additive exempt from certification, meaning it's deemed safe without the need for batch certification.

3. Restrictions on Impurities: Zinc Oxide used in products must meet stringent purity requirements, including limits on heavy metals like lead, cadmium, mercury, and arsenic. This ensures that the Zinc Oxide is safe for use, especially in products that come into contact with skin.

4. Labeling Requirements: Products containing Zinc Oxide as a color additive must include specific labeling about its use and any other legal requirements. This helps ensure that end-users are fully informed about the ingredients in their products.

5. Use in Drugs and Medical Devices in the US: The FDA allows Zinc Oxide in drug products, including those applied externally and around the eyes. It must be manufactured under good manufacturing practices to ensure safety, particularly regarding its purity and the absence of harmful impurities.

Key Players

- EverZinc
- Ace Chemie Zynk Energy Limited
- AG CHEMI GROUP s.r.o.
- CCL
- EverZinc
- Zinc Nacional
- HAKUSUI TECH
- LANXESS
- IEQSA
- Neo Zinc Oxide
- Pan-Continental Chemical Co., Ltd.
- Rubamin
- Tata Chemicals Ltd.
- TOHO ZINC CO., LTD.
- TP Polymer Private Limited
- Upper India
- Weifang Longda Zinc Industry Co., Ltd.
- Yongchang zinc industry Co., Ltd.

• Zinc Oxide Australia

• Zochem, Inc

Conclusion

Zinc Oxide continues to play a critical role across various industries due to its diverse applications ranging from cosmetics and pharmaceuticals to industrial and food products. Its regulatory status, particularly in major markets like the EU and the US, underscores its safety and versatility when used within prescribed limits. Market trends indicate stable growth in demand, driven by its efficacy and the regulatory endorsement of its safety across multiple consumer-facing applications.

Manufacturers and stakeholders are encouraged to maintain high standards of production and compliance to meet both regulatory requirements and market expectations. This strategic approach will not only ensure safety and consumer trust but also enhance the market position of Zinc Oxide in the global marketplace.

Lawrence John Prudour +91 91308 55334 Lawrence@prudour.com

This press release can be viewed online at: https://www.einpresswire.com/article/780611784

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire[™], tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2025 Newsmatics Inc. All Right Reserved.