

# **United States Surface Treatment Market By Chemical Type (Cleaners, Plating Chemicals, Conversion Coating, Others), By End User (Transportation, Construction, Packaging, Others), By Region, Competition, Forecast and Opportunities, 2019-2029F**

<https://marketpublishers.com/r/UB0D0C164065EN.html>

Date: May 2024

Pages: 82

Price: US\$ 3,500.00 (Single User License)

ID: UB0D0C164065EN

## **Abstracts**

The United States Surface Treatment Market was valued at USD 442.35 million in 2023 and is anticipated to project steady growth in the forecast period with a CAGR of 4.28% through 2029. Surface treatment is a crucial process that involves applying various chemical techniques to modify the surface properties of materials, resulting in improved durability, enhanced corrosion resistance, and increased aesthetic appeal. It plays a pivotal role in multiple industries, including automotive, aerospace, construction, and electronics, where the quality and longevity of materials are of utmost importance.

Innovation and research have contributed significantly to shaping the future of the surface treatment market. The continuous development of environmentally friendly and sustainable solutions has paved the way for further growth and advancement in the industry. One notable area of progress is the integration of nanotechnology into surface treatment processes, which presents tremendous opportunities for enhancing performance and functionality. It is further important to note that the market's growth might face challenges due to the implementation of stringent environmental regulations concerning the use of certain chemicals in surface treatments. Nevertheless, these challenges also serve as catalysts for innovation, encouraging the development of green and sustainable chemicals that meet regulatory requirements while maintaining the desired effectiveness.

## **Key Market Drivers**

## Growing Demand of Surface Treatment in Construction Industry

Surface treatment is a vital process that involves the application of various chemical techniques to modify the surface properties of a material. This alteration enhances its durability, corrosion resistance, and aesthetic appeal, making it indispensable in the field of construction. From concrete and steel structures to architectural and decorative elements, surface treatment finds widespread applications.

In the United States, the construction industry is experiencing a significant surge in activities, both in the public and private sectors. This upswing has consequently led to a substantial demand for surface treatment solutions. With a strong focus on infrastructure development and a robust housing market, the need for effective surface treatments has intensified.

Surface treatment chemicals play a crucial role in safeguarding construction materials from environmental damage, wear and tear, and corrosion. Additionally, they contribute to the visual enhancement of structures, amplifying their market value and longevity.

In light of the construction industry's increasing environmental impact, there is a growing demand for sustainable and eco-friendly materials and processes. This shift towards sustainability has extended to surface treatments as well, prompting a rising demand for environmentally friendly solutions.

To meet this demand, manufacturers are actively developing and introducing greener options in the form of water-based coatings and treatments that reduce volatile organic compound (VOC) emissions. These eco-friendly surface treatment solutions not only comply with regulatory requirements but also cater to the preferences of environmentally conscious consumers.

## Growing Demand of Surface Treatment in Automotive Industry

The automotive industry, renowned for its significant consumption of surface treatment solutions, heavily relies on these applications to safeguard vehicle components from the perils of wear and tear, corrosion, and environmental damage.

With the continuous growth of the U.S. automotive sector, the demand for surface treatment solutions is projected to scale proportionately. This escalation can be attributed to the rising production of vehicles, as well as the surging popularity of

electric vehicles (EVs), which further augments the need for surface treatment solutions.

The demand for surface treatment in the automotive industry has been stimulated by remarkable technological advancements. Cutting-edge innovations such as nano-coating and plasma treatment have revolutionized the industry by offering unparalleled protection and durability, rendering them highly suitable for automotive applications. For instance, nano-coatings have witnessed increasing utilization in the automotive sector due to their exceptional corrosion resistance, scratch resistance, and UV protection properties. These invaluable characteristics make nano-coatings an ideal choice for safeguarding various vehicle parts, including the body, engine, and interior components.

There is a growing emphasis on sustainability within the automotive industry, which has extended to the realm of surface treatments as well. Manufacturers are actively developing eco-friendly surface treatment solutions that not only reduce volatile organic compound (VOC) emissions but also have minimal environmental impact.

These sustainable surface treatment options not only comply with regulatory requirements but also align with the discerning consumer preference for environmentally friendly products. As a result, significant growth is anticipated for these solutions in the coming years, as they pave the way for a greener and more sustainable automotive industry.

## Key Market Challenges

### Raw Material Costs and Supply Chain Disruptions

The cost of raw materials is a critical factor that profoundly impacts the profitability of companies operating in the surface treatment market. In recent times, there has been a notable surge in the prices of these materials, which can be attributed to a multitude of factors. These factors include demand-supply imbalances, geopolitical tensions, and the implementation of stringent environmental regulations.

The rising costs of raw materials directly influence the production costs, thereby squeezing the profit margins of manufacturers. Moreover, this increase in costs also leads to higher prices of end products, potentially dampening the overall demand.

The COVID-19 pandemic has further exposed the vulnerabilities of global supply chains, resulting in widespread disruptions. These disruptions have had a significant

impact on U.S. chemical manufacturers, including those involved in producing surface treatment solutions.

The disruptions in the supply chain have caused delays in the delivery of raw materials, longer lead times, and increased uncertainty in production schedules. These challenges have only exacerbated the issue of rising raw material costs, posing additional hurdles for companies in the surface treatment market.

## Key Market Trends

### Rising Demand for Anti-Corrosion Treatments

Corrosion, a natural process that can cause severe damage to various materials, especially metals, poses a significant threat to their lifespan and overall performance. To combat this issue, anti-corrosion treatments, also referred to as corrosion protection treatments, have emerged as effective solutions. These treatments involve the application of specialized coatings or protective layers on surfaces to prevent or minimize corrosion.

The benefits offered by anti-corrosion treatments are numerous and far-reaching. Apart from extending the durability of materials, they also contribute to reduced maintenance costs and improved aesthetics. Consequently, these treatments have gained immense popularity across diverse industries, where the demand for enhanced performance and longevity is paramount.

In the aerospace industry, where safety is of utmost importance, anti-corrosion treatments play a crucial role. By safeguarding crucial aircraft components from corrosion, these treatments help maintain the structural integrity of the aircraft, mitigating the risk of catastrophic failures.

The rising demand for anti-corrosion treatments has emerged as a significant trend in the United States surface treatment market. As industries continue to seek innovative solutions for improving the durability and performance of materials, the demand for these treatments is expected to witness further growth. This trend underscores the increasing significance of corrosion protection in the modern industrial landscape and highlights promising growth prospects for the U.S. surface treatment market.

## Segmental Insights

## Chemical Type Insights

Based on the chemical type, the plating chemicals segment emerged as the fastest growing segment in the United States market for surface treatment in 2023. Plating chemicals are widely used across diverse industries, including electronics, automotive, and aerospace. In the electronics industry, for instance, plating chemicals play a vital role in enhancing the conductivity of components, ensuring the efficient functioning of electronic devices. This enables seamless data transfer and optimal performance.

In the automotive and aerospace sectors, these chemicals are employed to improve the durability and corrosion resistance of various parts. By providing a protective coating, plating chemicals enhance the lifespan and overall performance of critical components, ensuring their reliability even in demanding conditions.

Plating chemicals offer a range of unique benefits that contribute to their dominance in the surface treatment market. Apart from their exceptional corrosion and wear protection, they also possess the ability to enhance the aesthetic appeal of surfaces, making them highly sought after in industries where visual appeal is paramount, such as automotive and consumer goods sectors. The ability to create visually appealing finishes on various substrates makes plating chemicals invaluable for achieving desired product aesthetics and market competitiveness.

## End User Insights

The transportation segment is projected to experience rapid growth during the forecast period. The United States, being one of the largest automotive markets globally, has witnessed a remarkable surge in vehicle production over the years. As a result, the demand for surface treatments has soared significantly. These treatments play a crucial role in not only enhancing the overall performance but also ensuring the durability and aesthetics of various automotive components, catering to the evolving needs of consumers.

Transportation, encompassing automotive, aerospace, and marine sectors, relies heavily on materials that can withstand the harshest conditions, resist wear, and tear, and possess extended lifespans. Surface treatments, such as plating and coating, come into play to provide these materials with enhanced corrosion resistance, improved hardness, and increased durability. The indispensable nature of surface treatment in the transportation industry stems from the growing requirement for sturdy, long-lasting

components that can withstand the rigors of everyday use and maintain their quality over time.

## Regional Insights

Mid-West emerged as the dominant player in the United States Surface Treatment Market in 2023, holding the largest market share in terms of value. The Midwest region, known for its diverse and thriving industries, is home to several key sectors that heavily rely on surface treatments. These sectors include the automotive, aerospace, construction, and agricultural industries, which play a significant role in driving economic growth and innovation in the region. The high concentration of these industries in the Midwest not only fuels the demand for surface treatment solutions but also fosters a collaborative environment for knowledge sharing and industry advancements.

One of the key strengths of the Midwest is its abundant supply of raw materials essential for surface treatment processes. The region boasts a rich reserve of metals and minerals that are crucial for various surface treatments, including plating chemicals. This availability of raw materials not only ensures a steady supply chain but also contributes to lower production costs, making the Midwest an attractive destination for businesses in need of surface treatment solutions.

The Midwest takes pride in its robust infrastructure, which includes an unrivaled network of top-tier universities and research institutions. These academic and research establishments actively contribute to the development and advancement of cutting-edge surface treatment technologies. By fostering collaboration between academia and industry, the Midwest cultivates an environment that promotes innovation, research, and the exchange of ideas, further propelling the region's dominance in the surface treatment market.

The Midwest's well-developed transportation and logistics infrastructure also play a vital role in the efficient distribution of surface treatment products. The region's extensive network of highways, railroads, and waterways provides seamless connectivity, enabling businesses to easily transport and deliver their surface treatment solutions to customers across the country and beyond. This logistical advantage enhances the Midwest's competitiveness and ability to meet the growing demands of the market.

## Key Market Players

Henkel AG & Co. KGaA

Chemetall Us, Inc.

OC Oerlikon Corp AG

Solvay SA

Yuken Industry C%li%Ltd

### Report Scope:

In this report, the United States Surface Treatment Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

United States Surface Treatment Market, By Chemical Type:

Cleaners

Plating Chemicals

Conversion Coating

Others

United States Surface Treatment Market, By End User:

Transportation

Construction

Packaging

Others

United States Surface Treatment Market, By Region:



North-East

Mid-West

South

West

## Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the United States Surface Treatment Market.

## Available Customizations:

United States Surface Treatment Market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

## Company Information

Detailed analysis and profiling of additional market players (up to five).



## Contents

### 1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
  - 1.2.1. Markets Covered
  - 1.2.2. Years Considered for Study
  - 1.2.3. Key Market Segmentations

### 2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

### 3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

### 4. UNITED STATES SURFACE TREATMENT MARKET OUTLOOK

- 4.1. Market Size & Forecast
  - 4.1.1. By Value
- 4.2. Market Share & Forecast
  - 4.2.1. By Chemical Type (Cleaners, Plating Chemicals, Conversion Coating, Others)
  - 4.2.2. By End User (Transportation, Construction, Packaging, Others)
  - 4.2.3. By Region
  - 4.2.4. By Company (2023)
- 4.3. Market Map
  - 4.3.1. By Chemical Type

4.3.2. By End User

4.3.3. By Region

## **5. NORTH-EAST SURFACE TREATMENT MARKET OUTLOOK**

5.1. Market Size & Forecast

5.1.1. By Value

5.2. Market Share & Forecast

5.2.1. By Chemical Type

5.2.2. By End User

## **6. MID-WEST SURFACE TREATMENT MARKET OUTLOOK**

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Chemical Type

6.2.2. By End User

## **7. SOUTH SURFACE TREATMENT MARKET OUTLOOK**

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Chemical Type

7.2.2. By End User

## **8. WEST SURFACE TREATMENT MARKET OUTLOOK**

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Chemical Type

8.2.2. By End User

## **9. MARKET DYNAMICS**

9.1. Drivers

9.2. Challenges

## **10. MARKET TRENDS & DEVELOPMENTS**

- 10.1. Recent Developments
- 10.2. Product Launches
- 10.3. Mergers & Acquisitions

## **11. POLICY & REGULATORY LANDSCAPE**

## **12. UNITED STATES ECONOMIC PROFILE**

## **13. COMPETITIVE LANDSCAPE**

- 13.1. Henkel AG & Co. KGaA
  - 13.1.1. Business Overview
  - 13.1.2. Company Snapshot
  - 13.1.3. Products & Services
  - 13.1.4. Financials (In case of listed)
  - 13.1.5. Recent Developments
  - 13.1.6. SWOT Analysis
- 13.2. Chemetall Us, Inc.
- 13.3. OC Oerlikon Corp AG
- 13.4. Solvay SA
- 13.5. Yuken Industry Co Ltd

## **14. STRATEGIC RECOMMENDATIONS**

## **15. ABOUT US & DISCLAIMER**

## I would like to order

Product name: United States Surface Treatment Market By Chemical Type (Cleaners, Plating Chemicals, Conversion Coating, Others), By End User (Transportation, Construction, Packaging, Others), By Region, Competition, Forecast and Opportunities, 2019-2029F

Product link: <https://marketpublishers.com/r/UB0D0C164065EN.html>

Price: US\$ 3,500.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/UB0D0C164065EN.html>