+44 20 8123 2220
info@marketpublishers.com

Bioadhesive Market Report by Type (Plant-Based, Animal-Based), End Use (Paper and Packaging, Construction, Wood, Personal Care, Healthcare, and Others), and Region 2024-2032

https://marketpublishers.com/r/B178CDA94C50EN.html
Date: January 2024
Pages: 139
Price: US$ 3,899.00 (Single User License)
ID: B178CDA94C50EN

Abstracts

The global bioadhesive market size reached US$ 2.8 Billion in 2023. Looking forward, IMARC Group expects the market to reach US$ 8.2 Billion by 2032, exhibiting a growth rate (CAGR) of 12.2% during 2024-2032. The increasing demand for natural and eco-friendly products among the masses, the widespread product utilization in the medical industry, and the implementation of various government initiatives to promote the use of eco-friendly products are some of the major factors propelling the market.

Bioadhesives are natural polymeric materials with adhesive properties or glues that are derived from natural or renewable resources, such as plants, animals, or microorganisms. They are manufactured using cellulose, starch, chitosan, alginate, gelatin, collagen, and albumin proteins. They are designed to adhere to biological surfaces, including tissues, skin, or other organic materials. Bioadhesives are widely used to improve the barrier properties of packaging materials. They are also employed in dental applications, such as filling cavities, closing wounds, and promoting healing, and delivering drugs to the gastrointestinal tract or the nasal cavity. As compared to traditional adhesives, bioadhesives are non-toxic, biocompatible, and environmentally friendly. In addition to this, they exhibit flexibility, biodegradability, and the ability to adhere to wet surfaces, making them versatile in different environments. As a result, bioadhesives find extensive applications across the paper and packaging, wood, personal care, and healthcare industries.

The global bioadhesive market is expected to expand at a larger CAGR during the forecast period. The rising awareness among consumers and industries about the

+44 20 8123 2220
info@marketpublishers.com

importance of sustainability and environmental conservation is favoring the market growth. In addition to this, the increasing adoption of bioadhesives due to the growing environmental consciousness and rising awareness regarding the adverse effects of synthetic adhesives is contributing to the market expansion. Moreover, the increasing product application in packaging, construction, healthcare, and personal care industries owing to its unique properties, such as biocompatibility, flexibility, and strong bonding capabilities, is providing an impetus to the market growth. Furthermore, the implementation of various government initiatives encouraging the use of bio-based products and significant growth in the packaging industry are supporting the market growth.

Bioadhesive Market Trends/Drivers:
The widespread product adoption in the healthcare industry

Bioadhesives are substances that can adhere to biological tissues, such as skin, mucous membranes, and other soft tissues. They are commonly used in healthcare for wound closure, drug delivery, and tissue engineering applications. Moreover, bioadhesives are rapidly replacing conventional invasive wound closure methods, such as staples, surgical sutures, and wires, owing to their anti-inflammatory, better wound healing, antibacterial, antioxidant, and leakage protection properties. Besides this, the widespread product utilization for developing drug delivery systems, such as patches, films, or nanoparticles that can adhere to mucosal surfaces like the oral cavity and nasal passages for a controlled release of medications, is favoring the market growth. These systems further improve drug efficacy and patient compliance and reduce systemic side effects, which, in turn, is positively influencing the market growth.

Growing demand for eco-friendly and sustainable products

Bioadhesives derived from renewable resources that have a minimal environmental impact are gaining popularity due to the rising awareness among consumers and industries about the importance of sustainability and environmental conservation. In addition to this, several companies are adopting sustainability goals and incorporating eco-friendly practices, such as the use of sustainable materials, which is further propelling the market growth. Furthermore, the implementation of various government initiatives to promote sustainability and reduce the use of hazardous chemicals is contributing to the market growth. Besides this, the growing inclination towards bioadhesives over synthetic adhesives, as they contain harmful chemicals and contribute to pollution and waste, is acting as another growth-inducing factor.

+44 20 8123 2220
info@marketpublishers.com

Various product innovations

Researchers are exploring and making continuous improvements to enhance the performance, functionality, and sustainability of bioadhesives across various industries. Additionally, the introduction of bio-based nanomaterials, such as nanocellulose and nanochitin, that help improve mechanical strength, adhesion properties, performance, and stability is favoring the market growth. Furthermore, the utilization of three-dimensional (3D) printing technology to offer customization and precise fabrication of complex structures with tailored adhesive properties is providing a considerable boost to the market growth. On the other hand, various strategies that are adopted by key market players, such as partnerships and acquisitions, are expected to propel the market growth.

Bioadhesive Industry Segmentation:
IMARC Group provides an analysis of the key trends in each segment of the global bioadhesive market report, along with forecasts at the global and regional levels from 2024-2032. Our report has categorized the market based on type and end-use.

Breakup by Type:

Plant-Based
Animal-Based

Plant-based bioadhesives dominate the market

The report has provided a detailed breakup and analysis of the bioadhesive market based on the type. This includes plant-based and animal-based. According to the report, plant-based represented the largest segment.

Plant-based bioadhesives are dominating the market due to their renewable nature, biodegradability, and reduced environmental impact. These materials are derived from renewable plant sources and are an eco-friendly alternative to traditional adhesives. Plant-based bioadhesives are formulated using natural compounds found in plants, such as starch, cellulose, soy protein, tannins, and vegetable oils. They are extensively used in various applications, including packaging, woodworking, construction, paper bonding, laminating, and carpet backing. Moreover, plant-based bioadhesives are gaining traction due to the growing concerns about climate change, deforestation, and pollution among the masses. Apart from this, the rising health consciousness and safety considerations are facilitating the product demand as they are safer and have lower

+44 20 8123 2220
info@marketpublishers.com

toxicity levels.

Breakup by End Use:

Paper and Packaging
Construction
Wood
Personal Care
Healthcare
Others

Paper and packaging hold the largest market share

A detailed breakup and analysis of the bioadhesive market based on the end-use has also been provided in the report. This includes paper and packaging, construction, wood, personal care, healthcare, and others. According to the report, paper and packaging accounted for the largest market share.

Bioadhesives are widely used in the paper and packaging industry to bond paper fibers, attach labels and stickers to packaging, and seal boxes and bags. They are widely preferred for their eco-friendly properties and are commonly used in flexible packaging, specialty packaging, printed sheet lamination, and cigarettes and filters. Moreover, bioadhesives, such as starch-based adhesives, are used to bond the flat outer layers of corrugated cardboard boxes as they provide a strong bonding between the layers, ensuring the structural integrity of the boxes. Additionally, the widespread product utilization in the form of hot melt adhesives or water-based adhesives to seal the bottom and side seams of paper bags, providing reliable and strong adhesion, is contributing to the market growth.

Breakup by Region:

North America
Asia Pacific
Europe
Latin America
Middle East and Africa

Europe exhibits a clear dominance, accounting for the largest bioadhesive market share

+44 20 8123 2220
info@marketpublishers.com

The report has also provided a comprehensive analysis of all the major regional markets, which include North America, Asia Pacific, Europe, Latin America, and the Middle East and Africa. According to the report, Europe represented the largest market segment.

In Europe, bioadhesives are gaining popularity as sustainable alternatives to conventional adhesives. They are increasingly used in the automotive sector for interior components, such as carpet installation, headliner bonding, and panel assembly. In line with this, Europe has a strong textile industry that emphasizes sustainability. Bioadhesives, such as water-based polyurethane dispersions, are used in textile lamination, fabric bonding, and seam sealing applications, providing eco-friendly alternatives to traditional solvent-based adhesives. Moreover, several companies in Europe are manufacturing and distributing bioadhesives for different medical applications, which, in turn, is providing a thrust to the market growth.

Competitive Landscape:
The global bioadhesive market is experiencing significant growth as major key players and manufacturers are heavily focusing and investing in research and development (R&D) activities to launch and introduce innovative bioadhesive variants to attract more customers and expand their product portfolio. In line with this, the advent of 3D printing technology allows the fabrication of complex structures and patterns using bioadhesive materials that offer precise adhesion properties, expanding the range of applications for bioadhesives. Additionally, key players are working toward enhancing the mechanical properties of bioadhesives, such as adhesive strength, toughness, flexibility, and resistance to humidity, temperature, and ultraviolet (UV) exposure, which is creating a positive outlook for the market.

The report has provided a comprehensive analysis of the competitive landscape in the global bioadhesive market. Detailed profiles of all major companies have also been provided. Some of the key players in the global bioadhesive market include:

Henkel Corporation
Dow Chemical Company
Ashland Inc.
Adhesives Research, Inc.
EcoSynthetix
Recent Developments:
Henkel Corporation has been actively working toward developing bioadhesive solutions for packaging applications to offer sustainability without compromising performance. As

+44 20 8123 2220
info@marketpublishers.com

a result, in 2021, they launched ‘Technomelt Supra ECO’, a new addition to their hot melt adhesives portfolio that delivers lower carbon emissions. This innovation is a result of a successful partnership with Dow Inc., which developed a bio-based polyolefin elastomer made to substitute fossil-based materials.
Adhesives Research, Inc. has been heavily investing in the creation of a bio-adhesive for transdermal drug delivery that can be used to deliver drugs through the skin without causing irritation or damage.
EcoSynthetix has developed DuraBind engineered biopolymers, which is a bio-based adhesive that is used in a variety of applications such as paper and packaging. It offers strong adhesion, excellent bonding performance, and improved sustainability compared to traditional adhesives.

Key Questions Answered in This Report

1. What was the size of the global bioadhesive market in 2023?
2. What is the expected growth rate of the global bioadhesive market during 2024-2032?
3. What are the key factors driving the global bioadhesive market?
4. What has been the impact of COVID-19 on the global bioadhesive market?
5. What is the breakup of the global bioadhesive market based on the end-use?
6. What are the key regions in the global bioadhesive market?
7. Who are the key players/companies in the global bioadhesive market?

+44 20 8123 2220
info@marketpublishers.com

Contents

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

List Of Tables

LIST OF TABLES

+44 20 8123 2220
info@marketpublishers.com

List Of Figures

LIST OF FIGURES

+44 20 8123 2220
info@marketpublishers.com

+44 20 8123 2220
info@marketpublishers.com

I would like to order

Product name: Bioadhesive Market Report by Type (Plant-Based, Animal-Based), End Use (Paper and Packaging, Construction, Wood, Personal Care, Healthcare, and Others), and Region 2024-2032

Product link: https://marketpublishers.com/r/B178CDA94C50EN.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 https://marketpublishers.com/r/B178CDA94C50EN.html

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 https://marketpublishers.com/docs/terms.html

To place an order via fax simply print this form, fill in the information below

+44 20 8123 2220
info@marketpublishers.com

and fax the completed form to +44 20 7900 3970