

New Breakthrough: China Polyurethane Acrylate Oligomer Factory Launches Ultra-Fast Curing Solutions



Jiangmen, Guangdong Jan 15, 2026 (IssueWire.com) - In the rapidly evolving landscape of high-performance materials, the demand for efficiency and precision has never been greater. As global industries shift toward sustainable and rapid-processing technologies, UV-curable systems have emerged as a cornerstone of modern manufacturing. A significant milestone in this sector was reached recently as a prominent China Polyurethane Acrylate Oligomer Factory, Guangdong Ever Ray Environmental Material Co., Ltd., announced the successful rollout of its latest ultra-fast curing solutions. These innovations are designed to meet the rigorous demands of high-speed production lines in the electronics, automotive, and packaging sectors, providing a balance of rapid film formation and superior physical properties.

The UV-curable resin industry is currently experiencing a transformative phase, driven by the push for zero-VOC (Volatile Organic Compound) emissions and the need for immediate processing capabilities. Industry data suggests that the global UV-curable resins market is projected to reach over \$8 billion by 2025, with acrylates—specifically polyurethane acrylates—dominating the market share. This growth is underpinned by the versatility of these materials, which offer a unique combination of toughness, chemical resistance, and adhesion. By focusing on ultra-fast curing speeds, Guangdong Ever Ray is positioning its portfolio to address the "bottleneck" of production cycles, where the speed of chemical cross-linking often dictates the overall output of automated assembly lines.

Specialized Solutions for Modern Industrial Challenges

The new product line introduced by the factory focuses on specialized polyurethane acrylate oligomers, including water-borne, aliphatic, and aromatic variants. Each of these categories serves a distinct strategic purpose in the industrial ecosystem. For instance, the aliphatic urethane acrylate series is engineered for applications requiring high weatherability and non-yellowing characteristics, such as automotive interior coatings and high-end consumer electronics. On the other hand, the aromatic urethane acrylate solutions are optimized for rapid drying and high scratch resistance, making them ideal for matte systems and rigid plastic substrates like ABS and PC.

Guangdong Ever Ray Environmental Material Co., Ltd., established in 2006, has spent nearly two decades refining these chemical structures. As a high-tech enterprise, the company has transitioned from a traditional manufacturer to a research-driven entity that provides customized solutions. Their expertise extends across a wide spectrum of oligomers, including epoxy acrylate, polyester acrylate, and pure acrylate. This diverse technical foundation allows the factory to tweak functionality and viscosity to match specific application scenarios—whether it is the delicate snowflake effect in UV printing inks or the high-gloss, high-hardness requirements of 3D printing resins.

Enhancing Efficiency Through R&D and Manufacturing Scale

The core advantage of this specialized China Polyurethane Acrylate Oligomer Factory lies in its integrated approach to R&D and large-scale manufacturing. Operating from two major production bases in Jiangmen and Yunfu, Guangdong, the company maintains a combined production area of approximately 50,000 square meters. With an annual capacity exceeding 20,000 tons and more than 14 dedicated production lines, Ever Ray is capable of maintaining rigorous quality control while scaling production to meet international demand.

Technical innovation at the facility is guided by a team of industry veterans and academic partnerships with institutions like Wuyi University's College of Chemical Technology. This collaboration has led to the development of "hyperbranched" and "special functional" modified acrylates that solve long-standing issues in the industry, such as low shrinkage and difficult adhesion on inert substrates like PET and PVC. For example, their recent patents in PVC surface treatment have revolutionized how flexible resins interact with challenging industrial surfaces, allowing for more durable and vibrant finishes in flooring and decorative films.

Diverse Application Scenarios and Client Success

The ultra-fast curing solutions are already being integrated into several high-growth sectors. In the 3C (Computer, Communication, and Consumer Electronics) industry, where product lifecycles are short and aesthetic quality is paramount, these oligomers are used in vacuum electroplating primers and topcoats. These coatings must not only cure in seconds but also provide a mirror-like finish with exceptional adhesion to the metallic layer.

In the wood and flooring industry, the speed of the UV curing process directly impacts the logistics of the factory floor. By utilizing Ever Ray's high-functionality polyurethane acrylates, manufacturers can move products from the coating line to packaging almost instantaneously. Major clients in the ink and printing sectors also benefit from the low-viscosity, high-reactivity monomers that ensure crisp image definition even at high press speeds. The ability to customize the "functionality" of the resin—ranging from difunctional to hexafunctional—allows formulators to dial in the exact balance of flexibility and hardness required for everything from nail gel polishes to industrial-grade adhesives.

Strategic Market Focus and Quality Assurance

A key differentiator for Ever Ray is its commitment to raw material traceability and advanced management methods. By selecting high-quality components from both domestic and international sources, the factory ensures that the final oligomer maintains a high degree of stability—a critical factor for global clients who rely on consistent performance across different batches. The integration of 100% reactive oligomers means that there is virtually no solvent loss during the curing process, aligning with the increasingly strict environmental regulations in markets like Europe and North America.

The company's presence at international exhibitions like CHINACOAT highlights its role as a benchmarking enterprise in the radiation curing industry. Visitors to their facilities or digital platforms often note the comprehensive nature of their testing protocols, which include both visual and functional inspections of finished products. This meticulous attention to detail ensures that the ultra-fast curing solutions do not sacrifice long-term durability for short-term speed.

Adapting to the Future of UV Technology

As the industry moves toward 2026 and beyond, the trend toward LED-UV curing and 3D printing (additive manufacturing) is becoming more pronounced. Traditional mercury lamp systems are being replaced by energy-efficient LED sources, which require resins with specific photosensitivity profiles. Guangdong Ever Ray's R&D department has already pivoted to develop oligomers that exhibit high reactivity under the narrow-spectrum output of LED-UV lamps. This forward-thinking approach ensures that their "Ultra-Fast Curing" label remains relevant even as the underlying hardware of the industry changes.

The versatility of the factory's product range is further exemplified by its involvement in niche markets such as UV inkjet and medical-grade adhesives. These applications require a level of purity and low odor that only a specialized manufacturer can provide. By maintaining a highly qualified technical team with decades of experience, the company is able to offer "overall solutions" rather than just standalone products, assisting clients in formulating the perfect end-user coating or ink.

The advancement of UV-curable technology is a testament to the synergy between chemical engineering and industrial necessity. By focusing on the development of high-performance polyurethane acrylate oligomers, Guangdong Ever Ray Environmental Material Co., Ltd. is not only enhancing the efficiency of its partners but also contributing to a more sustainable manufacturing future. The launch of these ultra-fast curing solutions represents a strategic response to a market that values time as much as quality. As industries continue to automate and accelerate, the role of specialized chemical factories in providing the foundational materials for this progress cannot be overstated. Through a combination of historical expertise and a commitment to future-ready innovation, the path forward for UV curing looks both rapid and resilient.

For more information on the full range of UV resins and technical solutions, visit the official website at <https://www.everayuvresin.com/>.

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