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FIVE TRENDS SHAPING THE FUTURE OF THE PLASTIC ADDITIVE MARKET

The plastic additive market is growing due to the rising demand for plastic additives from the packaging sector and the replacement of conventional materials by plastics in several applications. The rising wave of technologies such as bio-plasticizers, non-halogen flame retardants, and organic plastic pigments is creating significant potential in various construction, packaging, automotive, consumer goods, and other industries. The major growth drivers for this



market are increasing demand for plastics in various end use markets and increasingly stringent safety standards regarding smoke and flammability.

The plastic additive market is divided into several segments, such as plasticizers, flame retardants, pigments, stabilizers, impact modifiers, antioxidants, blowing agents, and others. Key players in the plastic additive market include Clariant, BASF SE, ExxonMobil, Akzo Nobel, DowDuPont, Evonik Industries, Lanxess, and Nabaltec. These have been working on different strategies to drive sales using highly influential marketing approaches; however, as we examine the challenges and opportunities ahead in this market, companies can benefit from a strategy of developing bio-plasticizers and non-halogenated flame retardants along with the key target market trends we have identified. Lucintel predicts the global plastic additive market will be valued at \$48.5 billion by 2025, with an expected CAGR of approx. 2.0% between 2020 and 2025.

Lucintel identifies five trends set to influence the global plastic additive market. Most of the industry players and experts agree that these five trends will accelerate developments in the plastic additive industry in the near future. In terms of the widespread knowledge about the plastic additive market already on the horizon, there is still a lack of unified perspective on the direction the industry is moving to proactively address developments. To help bring more clarity to this gap, our study aims to provide insights concerning the direction that changes are taking and how these changes will impact the plastic additive market.

1. Growing Use of Bio-Plasticizers

The shift toward renewable and biodegradable resources has resulted in the development of bioplasticizers. Bio-plasticizers are based on natural raw materials, including epoxidized triglyceride vegetable oils from soybean oil, linseed oil, castor oil, sunflower oil, and fatty acid esters (FAEs). The demand for bio-plasticizers is growing due to stringent government regulations and rising consumer health concerns. Bio-plasticizers help in the reduction of the carbon footprint, which is



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the major concern in this era. Government, manufacturers, and consumers/end users are looking

for safe, bio-degradable, and non-phthalate-based plasticizers for safety and sustainability. Bioplasticizers are used in a wide range of plastic applications, such as PVC resins, PVC cables, vinyl flooring, wire jacketing, automobile parts, and more. The use of bio-plasticizers in wire and cable can reduce greenhouse gas emission by up to 40% (claimed by Dow Ecolibrium[™] phthalate-free plasticizers from Dow Chemicals).



2. Increasing Focus on Non-Halogenated Flame Retardants

Demand for non-halogen flame retardants is increasing. These include intumescents (phosphorus-based) and metallic oxides. Non-halogen flame retardants require a higher load

level, and often need additional adjustments to maintain the mechanical properties of the plastic. Some of the environmentally friendly nonhalogenated flame retardant additives, such as ATH and organo-phosphorus, have gained significant popularity due to their their benefits and low cost. Many of the developed countries in North America and Europe are taking initiatives to ban the use of



hazardous chemicals in any product, considering the lethal effects on humans and the environment. Hence, the industry is witnessing a major shift from halogenated (chlorine and bromine-based) flame retardants to non-halogenated flame retardants, demand for which is being driven by safety standards.



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3. Growing Consumption of Nanopowder/Nanoparticle Aluminum Hydroxide

Nanopowder aluminum hydroxide is an advanced form of precipitated aluminum hydroxide,

which is used for flame retardants and fire retardant filler in polymer applications. It also acts as an effective smoke suppressant for a wide range of polymers such as polyesters, acrylics, ethylene vinyl acetate, epoxies, PVC, and rubber. It is a super ultrafine and very narrow particle-size distributionprecipitated aluminum hydroxide, specially formulated as functional filler and flame retardants and extender in various compounds.



4. Antioxidant Polymer Additives

Antioxidant polymer additives are essential because they support prevention of a process called

oxidation. In doing so, antioxidants stabilize plastic products' qualities and slow their degradation processes. Oxidation can cause loss of impact strength, elongation, surface cracks and discoloration. Antioxidants help prevent thermal oxidation reactions when plastics are processed at high temperatures, as well as light-assisted oxidation when plastics are exposed to UV light. The plastic products that most



commonly contain antioxidant additives include a variety of pipes and fittings used in the building and construction industry, polyethylene films used in a variety of applications from construction to food packaging, and products and films made from polypropylene.





5. Increasing Development of Organic Plastic Pigments

Organic pigments are the fastest-growing type of plastic pigments due to increasing environmental regulations in the plastic industry. Organic pigments have become important colorants for plastics due to their wide variety, bright color, high tinting strength and excellent application performance. Different types of organic pigments include azo pigments, diazo, naphthol, azo lakes,



metal complex, phthalocyanine, anthraquinone, and quinophthalone.

Strategic Considerations for Key Players in the Plastic Additive Market

The plastic additive industry is dynamic and ever-changing. Successful industry players are necessarily masters of innovation, change, and adaptation. To retain this status, they need to be attentive to current trends. We believe there will be promising opportunities for plastic additives in the construction, packaging, consumer goods, and automotive industries. As per Lucintel's latest market research report (Source: <u>https://www.lucintel.com/plastic-additive-market.aspx</u>), the <u>plastic additive market</u> is expected to grow with a CAGR of approx. 2.0% between 2020 and 2025, and reach \$48.5 billion by 2025. This market is primarily driven by the increasing demand for plastics in various end use markets and increasingly stringent safety standards regarding smoke and flammability.



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Whether you are new to the plastic additive market or an experienced player, it is important to understand the trends that impact the development process, as these trends as listed above will lead players to create long-term strategy formulation that will allow them to remain competitive and successful in the long run. For example, to capture growth, some of the strategic considerations for players in the plastic additive market are as follows:

- Plastic additive market players can increase their capabilities to develop bio-plasticizers for the reduction of the carbon footprint.
- Players can focus on antioxidant polymer additives and organic plastic pigments, which are expected to lead future trends.
- Investment to increase competencies in the development of non-halogen flame retardants, as they are environment friendly
- Research and development activities for the development of low-cost plastic additive

Note: In order to gain better understanding, and learn more about the scope, benefits, and companies researched, as well as other details in the plastic additive market report from Lucintel, click on https://www.lucintel.com/plastic-additive-market.aspx. This comprehensive report provides you in-depth analysis on market trends and forecast, segment analysis, regional analysis, competitive benchmarking, and company profiling of key players. In addition, we also offer **strategic growth consulting** to meet your customized needs. We have worked with many PE firms and corporate customers in the process of their market entry and M & A initiatives.



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