2012 European Fatty Acid Ester Derivatives Product Line Strategy Award
Frost & Sullivan’s Global Research Platform

Frost & Sullivan is in its 50th year in business with a global research organization of 1,800 analysts and consultants who monitor more than 300 industries and 250,000 companies. The company’s research philosophy originates with the CEO’s 360-Degree Perspective™, which serves as the foundation of its TEAM Research™ methodology. This unique approach enables us to determine how best-in-class companies worldwide manage growth, innovation and leadership. Based on the findings of this Best Practices research, Frost & Sullivan is proud to present the 2012 Europe Product Line Strategy Award in Fatty Acid Ester Derivatives to CREMER OLEO GmbH & Co. KG.

Key Industry Challenges

The European natural fatty acids market is in a mature stage. As a commoditized and a highly consolidated market, participants create a niche for themselves by differentiating products through derivatives and its various applications. In Europe, natural fatty acids and their derivatives account for a major share of the total market. This trend is observed because customers prefer to incorporate sustainable ingredients in their final formulations. The REACH (Registration, Evaluation, Authorization and Restriction of Chemical substances) regulation has placed greater responsibility on suppliers to manufacture products with renewable sources. Frost & Sullivan recognizes that fatty acids and their derivatives have several end-user applications with personal care leading all segments accounting for 22.0 percent share of the total market. Personal care customers prefer to use products that are organic certified and formulated with sustainable ingredients. The base ingredient used in most personal care products is petrolatum, a mineral oil derivative. Petrolatum is obtained as a by-product in the downstream processing of crude. To overcome the sustainability issues prevailing in the market, formulators have started using hybrid petrolatums, which are combinations of petrolatum with renewable raw materials.

The key challenges affecting the fatty acid ester derivatives in personal care are to develop a 100 percent pure vegetable sourced cream-base that is easier to formulate with light emulsions and emollients giving a better feel on the skin. Such a formulation must be a true alternative to petrolatum in being effective, and possess biodegradable properties. Most European consumers prefer organic certified palm oil free cosmetics in light of the concern regarding deforestation thus fueling an increasing need for biodegradable personal care products. Accordingly, an effective product line strategy has to be developed to accommodate new renewable sources as raw materials and new formulations to overcome the key challenges.
Impact of Product Line Strategy Award on Key Stakeholders

The Product Line Strategy Award is a prestigious recognition of CREMER OLEO GmbH & Co. KG’s accomplishments in the fatty acid esters sector. An unbiased, third-party recognition can provide a profound impact in enhancing the brand value and accelerating CREMER OLEO GmbH & Co. KG’s growth. As captured in Chart 1 below, by researching, ranking, and recognizing those who deliver excellence and best practices in their respective endeavors, Frost & Sullivan hopes to inspire, influence, and impact three specific constituencies:

- **Investors**
  Investors and shareholders always welcome unbiased and impartial third-party recognition. Similarly, prospective investors and shareholders are drawn to companies with a well-established reputation for excellence. Unbiased validation is the best and most credible way to showcase an organization worthy of investment.

- **Customers**
  Third-party industry recognition has been proven to be the most effective way to assure customers that they are partnering with an organization that is leading in its field.

- **Employees**
  This Award represents the creativity and dedication of CREMER OLEO GmbH & Co. KG’s executive team and employees. Such public recognition can boost morale and inspire the team to continue its best-in-class pursuit of a strong competitive position for CREMER OLEO GmbH & Co. KG.

**Chart 1: Best Practices Leverage for Growth Acceleration**
Key Benchmarking Criteria for Product Line Strategy Award

For the Product Line Strategy Award, the following criteria were used to benchmark CREMER OLEO GmbH & Co. KG’s performance against key competitors:

- Breadth of Product Line
- Size of Addressable Customer Base
- Impact on Customer Value
- Impact on Market Share
- Breadth of Applications/Markets Served

Decision Support Matrix and Measurement Criteria

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Matrix (DSM). The DSM is an analytical tool that compares companies’ performance relative to each other with an integration of quantitative and qualitative metrics. The DSM features criteria unique to each Award category and ranks importance by assigning weights to each criterion. The relative weighting reflects current market conditions and illustrates the associated importance of each criterion according to Frost & Sullivan. Fundamentally, each DSM is distinct for each market and Award category. The DSM allows our research and consulting teams to objectively analyze each company’s performance on each criterion relative to its top competitors and assign performance ratings on that basis. The DSM follows a 10-point scale that allows for nuances in performance evaluation; ratings guidelines are shown in Chart 2.

Chart 2: Performance-Based Ratings for Decision Support Matrix

This exercise encompasses all criteria, leading to a weighted average ranking of each company. Researchers can then easily identify the company with the highest ranking. As a final step, the research team confirms the veracity of the model by ensuring that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.
Best Practice Award Analysis for CREMER OLEO GmbH & Co. KG

The Decision Support Matrix, shown in Chart 4, illustrates the relative importance of each criterion for the Product Line Strategy Award and the ratings for each company under evaluation. To remain unbiased while also protecting the interests of the other organizations reviewed, we have chosen to refer to the other key players as Competitor 1 and Competitor 2.

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Criterion 1: Breadth of Product Line

CREMER OLEO has developed an innovative cream-base ingredient, Cremerlin®PURA for all kinds of personal care applications. Cremerlin®PURA is a blend of organic triglycerides sourced from vegetable oil, processed according to an unique patented formulation. This sustainable alternative to petrolatum is GMO free with kosher certification. The product Cremerlin®PURA has a high degree of occlusivity, combined with enhanced oxidative stability. Cremerlin®PURA is odorless and colorless and can be compared with petrolatum. Frost & Sullivan notes that products which are marketed as petrolatum alternative are yellow in color and have poor stability against oxidation. Cremerlin®PURA does not accumulate hydrogen peroxide on prolonged exposure to natural environment which is proved by the Ranzimat (estimate the hydrogen peroxide build up in a product) test. During the Ranzimat test Cremerlin®PURA did not accumulate hydrogen peroxide and the transparent color of the product was maintained, proving its prolonged shelf life stability. CREMER OLEO offers four types of products that are 100 percent vegetable sourced, satisfying the sustainable requirement of the market. CREMER OLEO through its product line Cremerlin®PURA focuses on vegetable cream-base, palm oil free vegetable cream base, organic cream base, and palm oil free organic cream base. All products are suitable for almost every personal care application such as skin care, hair care.

Criterion 2: Size of Addressable Customer Base

CREMER OLEO targets various personal care customers utilizing fatty acids through its Cremerlin®PURA range of products. Frost & Sullivan’s independent research reveals that an unmet consumer need in this segment is a pure renewable source formulated product with stability. The Trans Epidermal Water Loss (TEWL) value of Cremerlin®PURA is 68.9 percent which is similar to the TEWL values of petrolatum (TEWL of 75 percent), so the end-products formulated with Cremerlin®PURA are effective. End-users or consumers of personal care products are looking for products with mineral oil free formulations and also sustainable. Frost & Sullivan’s research finds that CREMER OLEO is the only company to provide palm oil free versions of vegetable cream-base. The palm oil free versions of Cremerlin®PURA are formulated with coconut oil based organic ingredients.

Cremerlin®PURA is a lighter cream-base ingredient that gives a smooth and velvet feel without clogging the pores of the skin. This feature makes it suitable for face & skin care, decorative cosmetics like lipsticks, foundations, cream make-up as well as eye shadow, compact powder; it is also formulated as a lipid replenishing agent in hair and skin care products. The two organic versions of Cremerlin®PURA target the organic certified end-user products. Formulation of organic products with its base ingredient as Cremerlin®PURA helps personal care companies to increase the organic value of their end-product. Cremerlin®PURA portfolio was launched as an alternative to petrolatum in 2009. Three years after the launch, the product range comprises of four different products.
CREMER OLEO works in collaboration with its customers to develop formulations and also supply semi formulated products according to the end-user product requirement. These collaborations enable the launch of new products and development of existing products with a strong customer base.

**Criterion 3: Impact on Customer Value**

On a regular basis, CREMER OLEO conducts trainings and workshops for customers to make them understand the ingredients and its applications in a product. Most cream bases currently available in the market are sourced from mineral oil derivatives. Cremerlin®PURA products are pure vegetable origin blend of triglycerides that can be used in concentration range of 0.5 to 5 percent in emulsions and lighter formulations. In heavy formulations like foot cream, 5 to 15 percent concentration is used. Cremerlin®PURA range of products has a pH range of 3.0 to 8.5, helping in easy formulation in different personal care products. Cremerlin®PURA is a non-Newtonian fluid, so the viscosity of the fluid is predictable and can be adjusted by the formulator. Frost & Sullivan finds that this feature prevents loss of product and in turn results in cost savings. Cremerlin®PURA products can withstand heat up to 85°C; can be used in all types’ of emulsions formulations that are manufactured at 40 to 85°C. These features of Cremerlin®PURA, adds value to customers and creates new opportunities for product development.

**Criterion 4: Impact on Market Share**

CREMER OLEO is active in the natural fatty acids, fatty acid derivatives, and refined glycerin segment. CREMER OLEO sustains growth through innovation. The Cremerlin®PURA product line was rolled out in 2009, addressing the sustainability and effectiveness of natural fatty acid derivatives. Frost & Sullivan’s analysis shows that Cremerlin®PURA has attained a high market share in the natural alternatives to petrolatum segment in Europe as it significantly addresses key challenges like sustainable raw materials in this segment. CREMER OLEO is doing intensive research to develop liquid based pure vegetable origin fatty acid triglyceride derivatives. The products currently available in Cremerlin®PURA range are semi-solids. Addition of a liquid based product to the portfolio of Cremerlin®PURA will further increase Cremerlin Oleo’s market share.

**Criterion 5: Breadth of Applications/Markets Served**

Cremerlin®PURA range of products are preservative-free, organic certified from ECOCERT (ECOCERT is certifying agency for organic products in Europe), virtually odorless, colorless, and possess an unique patented formulation of organic compounds. It is the ideal ingredient to act as an organic replacement to petrolatum. The non-palm oil versions of Cremerlin®PURA are formulated with coconut oil based triglycerides. Though the raw material varies between the versions, chemical formulations are identical.
Cremerlin®PURA has a low iodine value (<2gl/100g) and a low acid value (1mgKOH/g) leading to its highly stable oxidative nature. Its highly compatible with all skin types and is allergen free. It is easy to apply because of its less sticky nature. From Frost & Sullivan’s perspective, the aforementioned characters of Cremerlin®PURA make it suitable for all types of cosmetic formulations. Cremerlin®PURA can also be used in pharmaceutical formulations like ointments to prevent water loss from the skin exposed.

**Conclusion**

Frost & Sullivan’s research clearly shows that there is no petrolatum alternative in the market that addresses all the market needs that would be required in a natural alternative. CREMER OLEO answers the market needs by offering an exclusive innovative line of products that are alternatives to petroleum derived petrolatum. Cremerlin®PURA is a pure vegetable oil based product, combined with oxidative stability, effectiveness and better biological degradability. There is no other petrolatum alternative in the market that addresses all these needs that would be required in a natural alternative. The innovative petrolatum alternative products developed by CREMER OLEO are proved to be effective for different kinds of cosmetic formulations. CREMER OLEO develops specific products in cooperation with consumers which gives the company a competitive advantage to widen its customer base. Thus, CREMER OLEO GmbH & Co. KG is deserving recipient of the 2012 Frost & Sullivan Product Line Strategy Award in the Natural Fatty Acid Esters Market.

**The CEO 360-Degree Perspective™ - Visionary Platform for Growth Strategies**

The CEO 360-Degree Perspective™ model provides a clear illustration of the complex business universe in which CEOs and their management teams live today. It represents the foundation of Frost & Sullivan’s global research organization and provides the basis on which companies can gain a visionary and strategic understanding of the market. The CEO 360-Degree Perspective™ is also a “must-have” requirement for the identification and analysis of best-practice performance by industry leaders.

The CEO 360-Degree Perspective™ model enables our clients to gain a comprehensive, action-oriented understanding of market evolution and its implications for their companies’ growth strategies. As illustrated in Chart 5 below, the following six-step process outlines how our researchers and consultants embed the CEO 360-Degree Perspective™ into their analyses and recommendations.
Critical Importance of TEAM Research

Frost & Sullivan’s TEAM Research methodology represents the analytical rigor of our research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all seven of Frost & Sullivan’s research methodologies. Our experience has shown over the years that companies too often make important growth decisions based on a narrow understanding of their environment, leading to errors of both omission and commission. Frost & Sullivan contends that successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. In that vein, the letters T, E, A and M reflect our core technical, economic, applied (financial and best practices) and market analyses. The integration of these research disciplines into the TEAM Research methodology provides an evaluation platform for benchmarking industry players and for creating high-potential growth strategies for our clients.
About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, enables clients to accelerate growth and achieve best-in-class positions in growth, innovation and leadership. The company’s Growth Partnership Service provides the CEO and the CEO's Growth Team with disciplined research and best-practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from more than 40 offices on six continents. To join our Growth Partnership, please visit [http://www.frost.com](http://www.frost.com).