



Stepan Company Recognized as the

2021

Company of the Year

European Sustainable Ingredients
in Hair Conditioning Industry

Excellence in Best Practices

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each Award category before determining the final Award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Stepan excels in many of the criteria in the Sustainable Ingredient in the Hair Conditioning space.

AWARD CRITERIA	
<i>Visionary Innovation & Performance</i>	<i>Customer Impact</i>
Addressing Unmet Needs	Price/Performance Value
Visionary Scenarios Through Mega Trends	Customer Purchase Experience
Implementation of Best Practices	Customer Ownership Experience
Leadership Focus	Customer Service Experience
Financial Performance	Brand Equity

Addressing Unmet Needs

Founded in 1932, US-based Stepan Company in Northfield, Illinois, is a global specialty and intermediate chemical manufacturer. With an annual revenue of around \$2 billion, Stepan operates in multiple markets, such as agriculture; construction; industrial products; insulation; personal care; construction; household, institutional, and industrial cleaning; oilfields; and phthalic anhydride.

Frost & Sullivan notes that Stepan’s recent achievements in the personal care ingredient space have been quite commendable. Launched in July 2020, STEPANQUAT® Soleil is a high-performance hair conditioning agent for demanding consumers. As an esterquat designed for hair conditioning, STEPANQUAT Soleil smooths each strand of hair, making the hair super soft and manageable. Additionally, this product allows both dry and wet hair to be combed easily, making the solution a preferred option for consumers. Compared to the previously launched ingredient STEPANQUAT Helia (95% active), STEPANQUAT Soleil is a 100% active liquid, which makes it simpler and safer for formulators to design their products accordingly. The launch of this ingredient allows Stepan to cater to key customers’ demand for an ingredient with superior functional performance and a high sustainability quotient.

STEPANQUAT Soleil has a better sustainability profile than conventional functional ingredients, such as behentrimonium chloride (BTAC) and cetrimonium chloride (CETAC), for hair conditioning. According to OECD 301B protocol (biodegradation test), STEPANQUAT Soleil shows a read-across biodegradability of 87.1%. In contrast, CETAC and BTAC are non-biodegradable and labeled as environmentally toxic. Moreover, with the use of renewable feedstock and the ingredient’s biodegradable nature, the

sustainability credentials of STEPANQUAT Soleil are increased.

Visionary Scenarios through Mega Trends

Stepan understands that consumers today demand clean-label products with few chemical transformations, locally sourced products, and products that do not cause deforestation. Stepan uses sunflower oil for the manufacturing of STEPANQUAT® Soleil rather than palm-derived fatty acid, unlike other manufacturers. Sunflower oil is a well-accepted feedstock by both customers and end-use consumers and is accepted as a clean-label ingredient. Compared to using BTAC as a conditioning agent, STEPANQUAT Soleil is substantive and provides a longer lasting effect on the hair. In addition, Stepan's ingredient outperforms traditionally available ingredients in terms of conditioning and application benefits. The ingredient can be used in a wide range of care products, such as hair conditioners (rinse off or leave in), hair styling products, conditioning shampoo, hand soaps, and shower gels/body washes, making it a preferred option for customers. Additionally, manufacturing a conditioner with STEPANQUAT Soleil (instead of BTAC) can reduce the temperature during the manufacturing process from 80 degrees Celsius to 65 degrees Celsius, saving time, energy, and capital on the process, which is a huge advantage for product formulators.

Local feedstock sourcing ensures the reduced transport and thus a lower carbon footprint, making it a sustainable and eco-friendly ingredient. Stepan believes that its manufacturing reliability and reproducibility are keys to its operational initiative. The company has proved its product ability to offer non-toxic and a biodegradable conditioning agent, which are the main downsides of BTAC and CETAC.

Stepan's STEPANQUAT Soleil technology is patented, allowing the company to offer an efficient product for end users and formulators. In addition, the ingredient is listed in Inventory of Existing Cosmetic Ingredients in China (IECIC), which is a differentiator among competing products.

Implementation of Best Practices

Although Stepan shows its dedication to achieving profitable growth through innovation and continuous improvement, it embraces its sustainability goals as well. Simultaneously, considering the positive feedback from customers, the company ensures that it fulfills its commitment to deliver quality and reliable products to customers. The company's similar approach and conviction are evident in the latest launch of STEPANQUAT Soleil.

Derived from non-GMO sunflower oil, Stepan's ingredient is free from sulfates, silicones, and preservatives, thereby aligning with consumers' demand for formulations with improved health and safety profiles. Moreover, because the ingredient is readily biodegradable, the environmental footprint is lower than traditional ingredients and can be used in a wide range of hair care product formats, including liquids, creams, and even solids.

Stepan has always conformed to the industry's legal frameworks, enabling it to demonstrate best practices in producing high-quality products. All of the company's global facilities are ISO 9001:2015 certified, with its US facilities conforming to the Responsible Care® program from the American Chemistry Council Inc (ACC). Other certifications held at various Stepan sites include the European Federation for Cosmetic Ingredients (EFFCI), Roundtable on Sustainable Palm Oil (RSPO), ISO 14001,

and ISO 50001. These certifications clearly indicate Stepan's excellence in ensuring the delivery of

"Frost & Sullivan commends Stepan for being a forerunner in offering a sustainable, biodegradable, and cost-effective ingredient with superior functionality, thereby meeting industry demands and outperforming competitors in the personal care (hair conditioning) ingredients space."

- Arun Ramesh, Research Manager

best-quality ingredients. In addition, the company strives to provide greater transparency and communication of its sustainability efforts while continuing to form strategic partnerships and meet targets based on material issues identified by the Sustainability Accounting Standards Board (SASB). The company's key focus is on the following four sustainability priorities: Investing in People, Efficiency for the Planet, Advantageous Products, and Responsible Practices. These priorities guide Stepan in its effort to deliver products that support customers' needs and to align with global goals for a

more sustainable planet. In addition, Stepan was ranked 45 by the Wall Street Journal survey on sustainable management.

Customer Purchase and Value Experience

Stepan prides itself on building customer relationships by connecting with customers directly for feedback and then aggregating and analyzing the data through its customer relationship management (CRM) system, thus aligning clients' needs with its solutions. In addition, Stepan learns the preferences of new customers and prospects by engaging on social media, in webinars, on its website, and through other digital marketing channels. The company uses consultants and third-party market research to understand macro- and micro-trends as well as the shifts in market dynamics that aid in more long-term strategic planning and product development efforts.

Frost & Sullivan notes that STEPANQUAT Soleil is a sustainable and safe alternative that does not compromise on performance. Stepan's price position is based on improved performance and the customer's willingness to pay for safe and sustainable ingredients. In addition to offering the product, Stepan suggests formulary changes and optimal processing, and its detailed discussions with formulators/customers allow effective decision making and help customers reduce costs by efficiently using ingredients. Moreover, Stepan provides flexibility in package type, size, and quantity, and customers can leverage Stepan's extensive distribution network that offers additional technical, pricing, and logistical support.

Brand Equity

Known as one of the leading suppliers of chemical specialties, Stepan has always focused on building a transparent brand identity and strives to provide greater transparency and communication in terms of its sustainability efforts. In November 2020, Stepan was ranked 45th (third among chemical manufacturers in the rankings) on the Wall Street Journal (WSJ) list of the most sustainably managed companies worldwide. After evaluating more than 5,500 publicly traded businesses, WSJ recognized Stepan for its leadership, governance, and sustainability efforts.

Furthermore, Frost & Sullivan appreciates how Stepan properly understands the need to develop and sustain long-term relationships with customers, partners, and suppliers, enabling it to gain recognition as a trustworthy brand and showcasing it as a premier brand in the sustainable personal care ingredient industry.

Conclusion

Offering a sustainable ingredient with superior health benefits in the hair conditioning space has been an ongoing challenge; however, Frost & Sullivan analysts recognize how Stepan has overcome this challenge through its patented technology and raw material to offer a product that is free from sulfates, silicones, and preservatives.

In addition, the raw material obtained is non-GMO and reliable through effective local sourcing, thus assuring that the ingredient contains no toxic chemicals. The product's biodegradability is outstanding in the personal care space, making it quite unique in the market when compared to conventional ingredients, such as BTAC and CETAC.

With its strong overall performance, Stepan Company has earned the 2021 Frost & Sullivan Company of the Year Award for its sustainable ingredients in the hair conditioning industry.

What You Need to Know about the Company of the Year Recognition

Frost & Sullivan's Company of the Year Award is its top honor and recognizes the market participant that exemplifies visionary innovation, market-leading performance, and unmatched customer care.

Best Practices Award Analysis

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Visionary Innovation & Performance

Addressing Unmet Needs: Customers' unmet or under-served needs are unearthed and addressed by a robust solution development process

Visionary Scenarios through Mega Trends: Long-range, macro-level scenarios are incorporated into the innovation strategy through the use of Mega Trends, thereby enabling first to market solutions and new growth opportunities

Leadership Focus: Company focuses on building a leadership position in core markets and on creating stiff barriers to entry for new competitors

Best Practices Implementation: Best-in-class implementation is characterized by processes, tools, or activities that generate a consistent and repeatable level of success

Financial Performance: Strong overall business performance is achieved in terms of revenue,

revenue growth, operating margin, and other key financial metrics

Customer Impact

Price/Performance Value: Products or services provide the best value for the price compared to similar market offerings

Customer Purchase Experience: Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

Customer Ownership Experience: Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

Customer Service Experience: Customer service is accessible, fast, stress-free, and high quality

Brand Equity: Customers perceive the brand positively and exhibit high brand loyalty

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Frost & Sullivan's proprietary model to systematically create on-going growth opportunities and strategies for our clients is fuelled by the Innovation Generator™. [Learn more.](#)

Key Impacts:

- **Growth Pipeline:** Continuous flow of Growth opportunities
- **Growth Strategies:** Proven Best Practices
- **Innovation Culture:** Optimized Customer Experience
- **ROI & Margin:** Implementation Excellence
- **Transformational Growth:** Industry Leadership



The Innovation Generator™

Our six analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- **Mega Trend (MT)**
- **Business Model (BM)**
- **Technology (TE)**
- **Industries (IN)**
- **Customer (CU)**
- **Geographies (GE)**

