



**2008 European Omega-3 Ingredients  
Excellence in Product Quality Award**



*“We accelerate growth”*

## 2008 European Omega-3 Ingredients Excellence in Product Quality Award

### Award Description

The Frost & Sullivan Award for Excellence in Product Quality is bestowed upon the company that has demonstrated superior quality control over its competitors in product manufacturing. Quality control is an essential element of satisfying customers, increasing repeat buying behaviour, and assuring long-term market survival.

### Research Methodology

To choose the Award recipient, the analyst team tracks all products and research and development projects within the industry. This is accomplished through interviews with market participants, end-users, distributors, and extensive secondary and technology research. Products are compared and ranked on the industry's quality standards. Frost & Sullivan then presents this Award to the company with the number one rank in product quality.

### Measurement Criteria

In addition to the methodology described above, there are specific criteria used to determine final competitor rankings in this industry. The Award recipient has excelled based on one or more of the following criteria:

- Lowest defect percentage per batch of units produced by suppliers in current base year
- Product ability to fulfill customer needs, in terms of functionality and user friendliness
- Lowest number of breakdowns or services required per year
- Strong level of product support provided to end-users



The 2008 Frost & Sullivan Award for Excellence in Product Quality in the European Omega-3 ingredients market is presented to EPAX AS (EPAX). EPAX, the Norwegian company, is a leading global supplier of highly concentrated marine-based Omega-3 eicosapentaenoic acid (EPA)/docosahexaenoic (DHA) fatty acids. The award is in recognition of the company's uncompromising commitment towards ensuring the highest product quality in the market in addition to meeting and surpassing global purity and safety standards. With the launch of its technology concept "Purity Beyond Expectation" in 2007, the company has successfully set a new quality benchmark for the industry. The company has attained a pioneering position in the market through its dedicated efforts in introducing new and improved product quality control parameters and procedures.

### **Strategic Acquisition Guaranteeing Raw Material Quality**

In 2007, EPAX was acquired by Austevoll Seafood ASA (Austevoll), a leading global, pelagic fishery company. This vertical integration enabled EPAX to avail of Austevoll's crude fish oil supplies from sustainable sources, thereby ensuring the highest quality raw materials for its products along with a longstanding oil supply. The deal also provided a core competency to EPAX in the form of direct access to the best quality crude fish oil available across the oceans of Peru and Chile. The integration with Austevoll has also facilitated the traceability of finished products back to the source, and allows full overview of quality control of the oils through integrated Quality Assurance throughout the supply/value chain assuring consistent product safety and quality to the customers. This has enabled fulfilling customer demand on effective quality control of the products.

### **Introduction of Revolutionary Purification Technology**

EPAX has established itself as a pioneer by setting new industry standards in terms of introducing a holistic approach to fish oil purity in the market. Its new quality specifications comply with and even surpass the global purity standards set for safe and healthy human consumption.

- EPAX is the first company in the market to expand the concept of measuring marine-oil purity by including oxidation parameters and trans fatty acids in addition to the conventional specifications on environmental pollutants. Through its launch of the "Purity Beyond Expectation" technology concept in 2007, the company has been successful in improving the stability of Omega-3 fish oils by 50 to 70 percent by adding its antioxidant blend. The new specifications for oxidation products in the oil, (as reflected by peroxide, anisidine, totox, absorbance, oligomers and acid values) are consistently maintained at industry minimum levels. Besides, they are significantly less than the international regulatory standards set by the European Pharmacopoeia and the Global Organisation for EPA and DHA Omega-3 (GOED) Voluntary Monograph. EPAX has been able to address a key market challenge with this innovative technology. High levels of oxidative products damage human cells whereas low levels of trans fats reduce heart disorder. The unique purification technology used by EPAX in its manufacturing process, guarantees a complete purity of the fish oil profile in addition to safe and long-term human consumption. Low oxidative parameters also ensure a longer shelf life, and prevent undesirable smell and taste in the Omega-3 supplements. As the worldwide demand for Omega-3 oils with higher purity is rising in the market on account of several health benefits (such as eye and cardiovascular health), EPAX is well positioned to leverage on the growing market.

- EPAX applies a proprietary purification step in addition to the customary processing, to remove environmental pollutants from the fish oils. This enables it to eliminate potential organic pollutants, trace metals and brominated flame retardants from the fish oils. In 2007, EPAX lowered the acceptable level of the sum of dioxins, furans and polychlorinated biphenyls (PCBs) for its Omega-3 concentrates. This specification level (4 parts per gram) is less than 60 percent compared to the standard (10 parts per gram) set by the European Union. The high standards of EPAX's quality strategy satisfy customer concerns regarding content of environmental pollutants in Omega-3 products.

### **Demonstration of Leadership Ability in Product Quality Control**

Over the years, EPAX has delivered products of consistent quality and purity as evident from various approvals and licenses from different authorities. Its manufacturing facility at Aalesund, Norway, manufactures only Omega-3 fish oils, thereby eliminating the risk of cross contamination from contact with vegetable or animal fats. The plant has been Good Manufacturing Practice (GMP)-approved by the Norwegian Medicines Agency for production of APIs (Active Pharmaceutical Ingredients). The plant also has certification from Hazard Analysis and Critical Control Point (HACCP) along with a license from the Norwegian Food Safety Authority to manufacture safe fish oil to be used in food and nutritional supplements. Moreover, the company has the lowest defect per cent (of 1-2 percent) per batch of units produced.

EPAX follows stringent internal quality audits to ensure that the products comply with GMP, API and other essential specification standards. It maintains written product specifications, material safety data sheets (MSDS) and complete quality control documentations for every production process with respect to purity, concentration levels, oxidation, colour, taste and smell.

Furthermore, in 2008, EPAX is set to demonstrate its responsibility towards environmental aspects by implementing an ISO 14001-approved environmental management system to monitor the environmental impact of its business.

### **Established Success in Achieving Superior Product Quality**

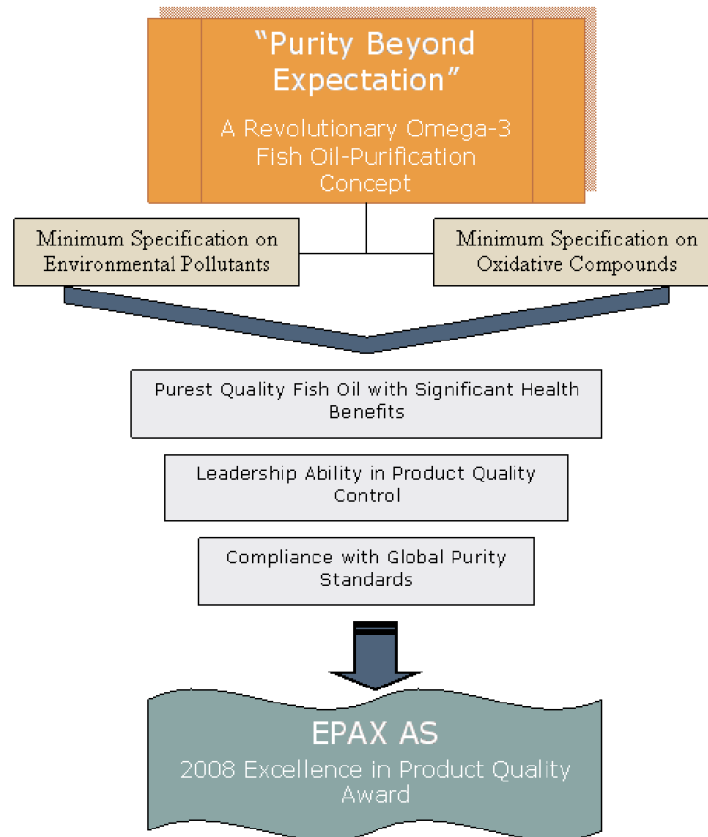
EPAX's Omega-3 fish oils, uniquely formulated with varying proportions and concentration levels of EPA/DHA fatty acids, are backed by clinical trials validating their safety and reliability. Its product portfolio has successfully addressed a wide variety of specific health concerns including mood and brain health, joint health, pre and postnatal health, eye health, cardiovascular health, cognitive health and healthy inflammatory response. The Karolinska Institute, Stockholm, has conducted a clinical research using EPAX's 1050 TG oil, which was published in the Archives of Neurology in 2006. It concluded that this Omega-3 formula slowed the onset of Alzheimer in patients in the early stage of the disease and helped combat depression and agitation symptoms associated with Alzheimer's disease. To date, EPAX's products have been used in more than 100 clinical studies. Banner Pharmacaps Inc., a global pharmaceutical company and a key customer of EPAX, recognised it as a Top Supplier of 2007 because of its ability to provide high quality, pure oils with precise delivery and lead times. Such customer acknowledgment demonstrates EPAX's achievement in generating quality control from the stage of product development to supply and delivery.

### **Participation in Trade Fairs to Demonstrate Product Quality Leadership**

EPAX actively takes part in various trade fairs, exhibitions and similar promotional activities to generate strong brand awareness of its superior quality products. At the 2007 Natural Products Expo West, it presented the "Purity Beyond Expectations" concept along with discussing the various processes of Omega-3 purification technology it employs. The company also displayed its vast expertise and application know-how on the Omega-3 purity standards at the 2007 Vitafoods International Tradeshow and Conference. EPAX's team received considerable acclaim at the event for illustrating the importance of Omega-3 in reducing and preventing hidden inflammation in humans.

The chart below represents the factors contributing to the Excellence in Product Quality Award for EPAX AS in the European Omega-3 Ingredients market in 2008.

Chart 1.1 Omega-3 Ingredients Market: Factors Contributing to the Excellence in Product Quality Award for EPAX AS (Europe), 2008



Source: Frost & Sullivan

## Conclusion

EPAX has consistently delivered high-quality products that exceed global quality and purity regulatory standards. Through the inventive “Purity Beyond Expectation” approach, it has demonstrated leadership abilities in offering the best-quality fish oils in the Omega-3 ingredients market. Fixing maximum limits for environmental pollutants and oxidation parameters far below global standards has attributed to EPAX’s position as a consistent supplier of safe and pure products. Its wide range of products with varying EPA/DHA concentrations and ratios target specific health issues. Strict focus on ensuring quality control in addition to the company’s active participation in numerous promotional activities has generated strong brand awareness and wide acceptance of its products. All the above factors clearly indicate the competitive edge the company has exhibited over other participants in the market by developing an oil-purification technology, which significantly contributes to the industry growth, thereby making EPAX AS the worthy recipient of the 2008 Frost & Sullivan Excellence in Product Quality Award in the European Omega-3 ingredients market.

## About Best Practices

Frost & Sullivan Best Practices Awards recognize companies in a variety of regional and global markets for demonstrating outstanding achievement and superior performance in areas such as leadership, technological innovation, customer service, and strategic product development. Industry analysts compare market participants and measure performance through in-depth interviews, analysis, and extensive secondary research in order to identify best practices in the industry.



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