

# **EcoLactam**® The impact that counts



HSCC※恒申



# Future forward chemistry

Fibrant's long history is built on high-quality innovation and sustainability as our key drivers.

As part of HSCC, we are the world's largest producer of nylon-6, fully integrated from its precursor caprolactam up to fabric production, with production plants in the Netherlands and China.

Our commitment to sustainability means looking at our impact from all angles. The result is a technology that has set a benchmark in the industry for a low carbon footprint. With the EcoLactam® product family, we are able to deliver an immensely positive environmental impact worldwide.

As a company, we have made significant strides in improving our sustainability performance. We will continue to do so. Using the SDGs as a guide, we aim to transition towards being completely climate natural by 2040.



















"We are a clear example of how the chemical industry can positively contribute to a sustainable world."

Martijn Amory, CEO Fibrant

# Smart innovation through research and partnerships

Fibrant offers solutions for a global economy that is in the process of transitioning to a more sustainable model. Our responsibility does not end with the products that we produce; rather, it encompasses the entirety of the value chain.



The introduction of the EcoLactam® product family is a direct result of our ongoing commitment to reducing our environmental footprint. We stand out from the crowd by collaborating with like-minded stakeholders and focusing on reducing our ecological footprint. This also allows us to support our stakeholders in achieving their sustainability goals.

#### **EcoLactam® product family**



Low carbon footprint high-quality through innovative technology.



Use of eco-friendly biowaste without depletion of fossil resources.



Use of post-consumer waste as a key source in circularity.

	Fossil Free	CFP level	High-end applicability	Plastic waste reduce/reuse
Standard caprolactam	0	0	•	0
EcoLactam® - Impact	0	•	•	0
EcoLactam® - Bio	•	•	•	0
EcoLactam® - Circular		0	•	•

### The value of EcoLactam®

Consumer preferences, public opinions and more stringent upcoming legislation drive the market to set more challenging sustainability targets.













Reducing Green House Gas emissions is the first step towards climate neutrality.







Sustainability and environmental goals

Scope 3 typically has the highest impact on the total sustainability performance.









of the Nylon footprint is defined by its precursor: caprolactam



>80%

of Scope 3 are raw materials: Nylon, Polyester, cotton, other



#### Select low footprint EcoLactam® as your Nylon precursor





Nylon footprint reduction up to 70%



Certified LCA



Globally available at industrial scale



Consistent high quality



Drop-in solution



#### Made with 100% renewable energy

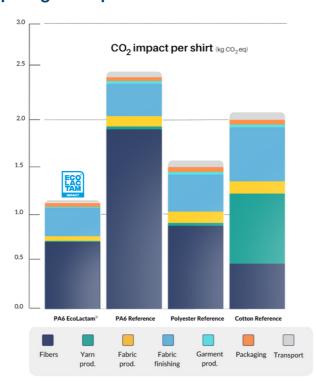
Since the start of 2022, we've moved to 100% renewable energy for the manufacturing of EcoLactam® in an ongoing commitment to minimize our environmental impact.



#### Lower Carbon Footprint than regular caprolactam\*

\* Based on average global production Source: Wood MacKenzie Global Polymer & Intermediates report Sept 2021.

#### Comparing the impact of various textile materials



<sup>\*</sup>Carbon footprint data analysis from bAwear Score.

EcoLactam® based nylon has the lowest cradle-to-garment footprint. Nylon's excellent durability combined with EcoLactam® is the most environmentally friendly option for your textiles.

### **Certified Life-Cycle Assessment**

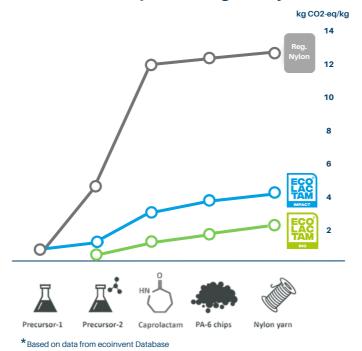
A significant part of the sustainability claim for brands and manufacturers is the reduction of their carbon footprint. Life Cycle Assessment, or LCA, is a methodology for assessing and quantifying the environmental impact of a product, process or service, and identification of major contributors to environmental impact. Key categories include climate change (global warming potential), depletion of resources, water and land use, human health, biodiversity and ecotoxicity.

Given the relatively high share caprolactam has in the total cradle-to-garment footprint, EcoLactam® is the solution needed to significantly reduce the footprint right from the beginning of the production process. EcoLactam® has the LCA validated by Intertek in accordance with the principle and requirements of ISO4040/44.

EcoLactam® product family was developed by focusing on the process, feedstocks and utilities used. Technology and the feedstock selection directly lower the footprint of EcoLactam®, and in parallel benefit, any nylon garments made with it. When produced on a large scale, EcoLactam® has a substantial and positive impact on the environment. The impact that counts.



#### **EcoLactam® footprint vs. regular Nylon**



We enable brands, yarn and fabric manufacturers to prove their sustainability claim by beginning their journey with a significantly reduced carbon footprint.

## Our markets, our future, your benefits

Nylon made with a low carbon footprint EcoLactam® is an essential component in producing fabrics, carpets, automotive parts and food packaging. As a producer of EcoLactam®, we understand the significance of reducing our carbon footprint in the manufacturing process.

Companies that prioritize low-carbon footprint materials contribute to a greener future for the planet while also improving their company's reputation and retaining the loyalty of environmentally conscious customers.

#### We serve the following industries:







Scan the QR code for more information and to contact us directly.

www.fibrant52.com/ecolactamfootprint

