

PRESS RELEASE

17 April 2024

Smart Chemistry for Next-Gen Biodegradable Polyester

The partnership between CHT and OceanSafe highlights a shared dedication to promoting sustainable practices in the textile industry. This collaboration is well-positioned to assist companies in meeting their sustainability objectives and driving positive change by providing innovative solutions for dyeing and finishing of textiles made from biodegradable polyester.

COOLDYE by CHT is designed for lower temperature dyeing of all types of PES fibers (virgin, recycled, and biodegradable). The application of CHT's COOLDYE dyeing process to the next-gen biodegradable polyester, naNea by OceanSafe, can efficiently help reduce the dyeing temperature, leading to savings in energy and time. The dyeing process of naNea is carried out at 110 °C, which is comparatively 20 °C lower than that of standard PES.

The COOLDYE system combines the soy-based leveling agent SARABID TS 300 and the sugar-based reducing agent REDULIT GIN to ensure a sustainable dyeing process. Both dyeing auxiliaries are biodegradable and meet the highest level of ecological requirements. The COOLDYE system is complemented by CHT's BEMACRON HP-LTD disperse dyes that specifically enable the low-temperature dyeing process, which saves energy and time.

ECOPERL 4 is applied on naNea for achieving a hydrophobic finish effect. ECOPERL 4 is a fluorine-free finishing agent that provides excellent water repellency and very good wash durability. It is a biobased and biodegradable product based on special functionalized polymers and waxes.

naNea by OceanSafe is the next-gen biodegradable polyester and serves as a replacement for conventional PES. Unlike conventional polyester, naNea

CHT Germany GmbH
Bismarckstraße 102
72072 Tübingen
Germany

Phone +49 7071 154-0
Fax +49 7071 154-290

www.cht.com
info@cht.com

Management:
Eva Baumann
Prof. Dr. Klaus R. Müller

Company headquarters:
72072 Tübingen
Commercial register: AG Stuttgart
HRB 381373
USt.-IdNr. DE 152 274 099

Bank account:
Commerzbank Tübingen
IBAN DE13 6414 0036 0891 3832 00
BIC COBADEFFXXX

is biodegradable in the marine environment by over 93 % after 99 days. naNea does not contain toxicants and is proven to be not eco-toxic.

naNea fibers and yarns match the performance of conventional polyester, making them an ideal choice for products where resilience and durability are paramount. Transitioning to this novel material in manufacturing processes is easy. naNea is market-ready and scalable today. naNea is the world's first and only synthetic textile material with Cradle to Cradle® Certified at Gold level.

By utilizing CHT's biobased auxiliaries for dyeing and finishing of biodegradable PES such as the naNea fiber, a compatible and responsible approach is ensured. In addition, the final product made from naNea materials and CHT chemistry can be compliant with the Cradle to Cradle® Certification.

Enhance your products with the best solutions and help make textiles more sustainable and ecological, together with CHT and OceanSafe.

About the CHT Group

The CHT Group is a medium-sized global player for specialty chemicals and active worldwide in development, production and sales. CHT Germany GmbH in Tübingen is the headquarters of the group of companies which focuses on sustainable chemical products and process solutions.

TEXTILE SOLUTIONS of CHT improve the quality, functionality as well as look and purity of textiles and optimize their manufacturing processes.

In the fields of silicones, building materials, paints, coatings, leather, release agents, paper, agrochemicals, mining as well as cleaning and care products innovative products and process solutions are provided by the Business Field INDUSTRY SOLUTIONS.

By combining the strengths of the complete group further innovative products, applications or processes are continually developed and vast technical support is offered within the SCIENCE & SERVICE SOLUTIONS. Highly qualified specialists work in state-of-the art laboratories for development, analytics and application technique in order to work out ideas and solutions that meet the latest requirements.

The CHT Group with its own production and sales locations is represented by 26 companies worldwide. In the financial year 2023, the CHT Group generated a group turnover of 604 million Euro with around 2,400 employees.

For more information, please visit www.cht.com

Contact:

Jens Isenbeck
Head of Marketing
Phone: +49 7071 154 430
Email: jens.isenbeck@cht.com