

# The Next-Gen Biodegradable Polyester



#### **Fact Sheet**

naNea is a novel co-polyester designed for both biodegradability and recyclability. The material is made from bio-based, recycled or virgin feedstock. Its polymer structure enables rapid biodegradability in the open environment, without the use of chemical additives.

naNea does not release persistent micro or nano plastics and is the world's only synthetic textile material to receive Cradle to Cradle Certified® Gold. naNea is an obvious choice for brands facing increasing legislative pressure to adopt environmentally responsible materials.

naNea is soft, matches the performance of PET and has an excellent built-in moisture management. As a drop-in technology, switching to naNea in manufacturing is easy.

Consumers benefit from a safe, durable material without harmful substances.

naNea is a highly scalable material by OceanSafe, the Swiss polymer science company pioneering next-gen materials for a circular economy.

Watch the video about the technology: Link



#### **Environmental Impact**

- Marine biodegradable in 99 days by >93% (ASTM D6691-17)
- No persistent microplastics
- Recyclable along with PET
- No antimony-based catalyst
- No toxicants or heavy metals
- Not ecotoxic
- Potential to reduce CO2 emissions

## 귀는 Technical Properties

- Very soft and pleasant hand-feel
- Durability and strength as PET
- Highly absorbent & hydrophilic
- Quick-dry & wicking properties
- Available as chips, fiber & filament
- Inherently flame-retardant
- Easy care & washable at 60°C



#### **Drop-In Technology**

- Compatible with existing textile machinery across entire value chain
- No equipment investment needed
- Highly scalable & market-ready
- Suitable for weaving & knitting
- Regular dyeing & finishing process
- Low-temperature dyeing



### **Consumer Benefits**

- Safe material for consumers
- No harmful substances, toxicants or heavy metals
- Long-lasting quality, easy care
- Skin-friendly material with soft touch
- No biodegradation during washing or use!

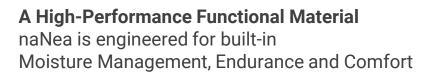


Join the network of leading brands and manufacturers using naNea. Get in touch and discover naNea today.





The Next-Gen Biodegradable Polyester



naNea stands out not only for its environmental advantages. but also for delivering unparalleled functionality and surprising versatility across a wide range of applications.

This unique blend of sustainability and performance makes naNea exceptionally valuable for brands seeking durability and functionality while adopting responsible materials.



# **How Does naNea Compare to Conventional PET?**

# naNea Polymer & **Yarn Properties**

- Comparable tenacity
- Similar elongation at break
- Inherently flame-retardant due to higher LOI

**Durability & Strength** 

Similar tear & tensile strength

Similar dimensional stability

Lower melting point & glass transition point

Similar pilling

Similar easy care

# Moisture Management

- Substantially higher hydrophilicity, absorption capacity and faster water penetration
- Higher moisture regain
- High dry rate
- Excellent evaporative resistance & wicking properties

# **Fabric Level**

- Very soft
- Pleasant hand-feel
- Similar stretch properties
- Good shape retention

#### **Perfect For**

- Sportswear
- Outdoor
- Workwear
- Insulation
- Non-Wovens

**Automotive** 

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