



INTRODUCING A SUSTAINABLE NYLON 6 SOLUTION FROM ADVANSIX

Aegis® Resins and Capran® BOPA Films Containing 100% Post-Industrial Recycled Content



AdvanSix is committed to using Advantaged Chemistries to reduce the environmental impact of its products and help customers achieve their sustainability goals. Together, we can offer innovative solutions that further reduce waste in product lifecycles and support the transition to a circular economy.

A Cost-Effective Solution Available Now

AdvanSix is introducing a new portfolio of nylon 6 Aegis® resins and Capran® BOPA films that are made with 100% allocated post-industrial recycled (PIR) raw materials. These new PIR-grade products enable plastics and film manufacturers to:

- Meet growing demand for environmentally friendly products made with recycled monomers reclaimed from waste streams.
- Experience NO change in product performance or processability, avoiding the typical tradeoffs of using recycled content.
- Encounter NO limiting factors common to other forms of recycled content.

PIR-grade products from AdvanSix are available now, providing an immediate and cost-effective sustainability solution for customers wishing to add more recycled content to their products.

Benefits of Using PIR-Grade Products from AdvanSix

- No compromise in performance or processability
- Greater recycled resin content (less virgin resin) in end products
- Smaller anticipated environmental footprint¹
- No costly requalification needed for existing customers
- No added food contact concerns
- Cost-effective path to sustainability
- **Available now**

¹ PIR-grade products from AdvanSix divert unreacted caprolactam from the waste stream while increasing the recycled content that customers can use in their end products.

The Best of Both Worlds: Trusted Performance AND Sustainability

New PIR-grade products from AdvanSix offer manufacturers an opportunity to get the best of both worlds: trusted performance AND a reduced environmental footprint¹.

Because these products offer the **same** excellent physical and mechanical properties as their traditional counterparts, customers can also expect:

- A seamless path to producing more sustainable downstream products.
- No costly requalification process².
- No issues related to collection contamination or food contact.
- No issues typically associated with post-consumer recycled nylon.

Now manufacturers have the means of retaining packaging performance with raw materials that can help improve their reputation for sustainability. See Table 1 for application examples.



Table 1: Opportunities for PIR-Grade Nylon 6 Products

Opportunities	Application Examples
Products requiring compliance with FDA regulations	<ul style="list-style-type: none"> • Food and medical packaging
Products having rigorous performance requirements	<ul style="list-style-type: none"> • Thermoformed/shrink meat packaging • Medical device packaging
Packaging that is traditionally difficult to recycle	<ul style="list-style-type: none"> • Bag-in-box beverage packaging
Applications that cannot tolerate contamination of color/odor	<ul style="list-style-type: none"> • Light-colored carpets • Food packaging
Any end-product that customers want to align to their corporate sustainability goals.	Applications requiring: <ul style="list-style-type: none"> • Reduced virgin raw materials • Increased recycle content • Reduced environmental footprint¹

¹ PIR-grade products from AdvanSix divert unreacted caprolactam from the waste stream while increasing the recycled content that customers can use in their end products.

² For existing customers

A Reliable, Confident Choice

AdvanSix is a vertically integrated manufacturer, producing all key ingredients of nylon 6 at world-scale facilities in North America, resulting in the highest levels of reliability and consistency in its virgin, standard-grade products. Now, those same characteristics are found in its nylon 6, 100% PIR grades too, enabling customers to make a confident choice for a more sustainable future.

Following nylon polymerization, AdvanSix recovers unreacted caprolactam from waste streams and recycles it back into the nylon manufacturing process. Using an industry-accepted mass balance method, AdvanSix allocates the recycled material into 100% PIR Aegis® resins and into 100% PIR Capran® BOPA films.

This allows customers to leverage the value of products offering higher recycled content and smaller environment footprints¹.

PIR-grade products from AdvanSix are certified by an independent third-party organization (SCS Global Services) for recycled content, which will be confirmed by annual audits. See Table 2 for a few examples of current products in our PIR portfolio, which is expected to grow as AdvanSix expands its recovery process, allowing for allocations to new grades.

Please contact your AdvanSix representative to learn more, and to secure your source of 100% PIR Aegis® resins and 100% PIR Capran® BOPA films.

Table 2: Examples of Available PIR Grades*

Traditional Aegis® or Capran® Products	New Post-Industrial Recycled (PIR) Grade Products	Description
Aegis® H135QP	Aegis® PIR-H135QP	Lubricated high-viscosity, nylon 6 resin for blown film
Aegis® MBM	Aegis® PIR-MBM	Terminated medium-viscosity nylon 6 resin for carpet
Capran® 1200RT	Capran® PIR-1200RT	12-micron, retort-grade BOPA film

**Ask your sales representative for a complete list of PIR-grade products.*





Note: This literature is intended to provide general information only. As such, AdvanSix assumes no liability for the interpretation or use of information presented herein. For recommendations specific to your applications, please contact the appropriate supplier(s).

Contact AdvanSix

To learn more about the benefits of Aegis® resins and Capran® films, visit [AdvanSix.com/NylonSolutions](https://www.advansix.com/NylonSolutions) or call: **1-844-890-8949** (toll free, U.S./Can.) **+1-973-526-1800** (international)

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September 2021-11
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