

POLYOLEFINS

ALIGNING WITH
SUSTAINABILITY GOALS



POLYOLEFINS ARE EVERYWHERE

Polyethylene (PE) and polypropylene (PP) are among the most popular plastics in the world. They are chemically inert, making them extremely suitable and safe for many types of packaging. They are lightweight, so more efficient to ship, and they offer good performance properties while being cost effective. And, they can fit a sustainable model as they have a high potential to be successfully recycled.

CREATING A MORE SUSTAINABLE PACKAGE

There are a number of ways to create packaging that is considered more sustainable. This can include increasing the percentage of post-consumer recycled content (PCR), reducing the carbon footprint during production or shipping, or improving package recyclability. Additionally, newer bio-derived polymers are available and can also contribute to a more sustainable package.

While these are all good ways to improve a package's sustainability, they aren't without their challenges. Increasing PCR especially can be tricky, but here are some considerations for achieving those higher percentages:

- Using more PCR can affect the color of your package as PCR streams can vary from region to region. Super concentrates can give greater flexibility in coloring higher levels of PCR than traditional masterbatches, and can be used in a multi-layer bottle construction.
- As PCR runs through multiple heat processes it can degrade. Additives can provide thermal stability by improving physical properties and neutralizing variability.



WHAT ARE YOUR GOALS?

You likely have specific goals identified that will result in more sustainable packaging. These may include:

- Achieve a percentage of all packaging that is reusable, recyclable or compostable
- Increase the use of post-consumer recycled (PCR) content, up to 100%
- Use lightweighting or other solutions that will help reduce your carbon footprint

- Replace petroleum-based materials with renewable materials such as bio-plastics

Whatever your goals, we can help you achieve them with customized solutions based on a number of factors. We will consider the type and percentage of PCR you are using, and will also work with you on your targeted let-down ratio (LDR) and the color or special effect you want to attain.

SUSTAINABILITY AT AVIENT

We have a mission that we are committed to and passionate about. It is to enable our customers' innovation and sustainability goals through world class products and services and excellence in the four cornerstones of:



PEOPLE



PRODUCTS



PLANET



PERFORMANCE

**WE HELP OUR CUSTOMERS
MAKE PRODUCTS THAT
ARE MORE SUSTAINABLE IN
8 DIFFERENT WAYS:**

- Lightweighting
- Reduced Energy Use
- Volatile Organic Compound Reduction
- Recycle Solutions
- Bio-polymers
- Eco-conscious
- Sustainable Infrastructure
- Human Health & Safety



For more information on how
we can help, visit avient.com



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