

Lavergne successfully producing white postconsumer recycled plastics

Lavergne is an innovative leader in plastics recycling — achieving impressive breakthroughs such as:

- Becoming the first company to successfully meet UL Standard 2809,
- "Closing the Tap" with our closed loop recycling process, and
- Achieving a superior product for Polyethylene Terephthalate or "PET" plastics.

Lavergne's transformative power continues. Our dynamic company has another unique offering for our partners and customers — white Post-Consumer Recycled (PCR) plastics.

It has been a lot of work recycling plastics and creating white resins. A standard recycling process — including Lavergne's — incorporates post-consumer plastics from multiple sources. Once those plastics are sorted, cleaned and shredded, the material is inevitably dark-colored or black.

Successfully recycling plastics in the color of white is the result of technology, engineering know-how, and a long-term vision of a world where all the plastic we need is already created.

White Post-Consumer Recycled (PCR) Plastics

Why does white-colored PCR matter? For starters — it's useful for our customers. Creating PCR plastics in white opens a greater range of options for manufacturers in the electronics, automotive, consumer goods industries, just to name a few.

Providing this unique product also demonstrates the continuous improvement in our sector and moving us closer to a world where all plastics are derived from recycled, post-consumer materials.

Advanced Recycling Technology

A lot of engineering know-how and effort goes into our white PCR work. The effort starts right from the beginning of the process. The steps include:

Separation — Using sophisticated technology to sort and separate white plastics from the large mass of post-consumer plastics collected

Creating a white-coloured master batch — Collecting those white-colored source materials to creating an initial batch of white-colored PCR pellets

Optimizing, stabilizing and colour matching — Optimizing and stabilizing the batch by adding new source plastics

Reactive Compounding — Lavergne's "special sauce" uses chemical additives to strengthen the molecular chain and the plastic's overall resilience

The recycling process follows our standard steps, but with a specialized focus on cleanly separating the white-coloured source material, cleaning, shredding and preparing a batch of white-coloured PCR material. And we do it with quality and at scale!

High-Quality Colour and Content

Quality control is at the heart of everything we do. Our future goals depends on it.

We measure the quality of the recycled resins, as well as the purity of the white-colored products.

Assessing the color, we use a spectrophotometer to measure the intensity of light passing through product samples. The CIELAB colour scale measures the purity of colors from zero to 100, where zero is pure black and 100 is pure white. Lavergne has successfully achieved a CIELAB score of 90.5.

Furthermore, Lavergne's white PCR currently comprises 75 percent post-consumer recycled content (ABS or HIPS). We are constantly improving these results as we anticipate reaching 85 percent in the near future.

Producing at Scale

Lavergne's white PCR production is not a small or "on-the-side" project. On the contrary, we are already producing white PCR resins at scale to supply the largest companies in the electronics, automotive and appliance manufacturing sectors.

Another Step Forward

Lavergne has an inspiring vision for the future. We believe in a world that will never need to create any new virgin plastics, and where all the plastics needed for innovative products are available through recycled materials.

Leveraging our innovative recycling technologies, Lavergne is moving towards this vision with unique product offerings, high quality and at scale.

Stay tuned to the Lavergne Newsroom for more breakthroughs.