

CASE STUDY

# Yellow Card issued for chemically recycled plastics

UL Solutions certification program helps plastics and resin manufacturers like ELIX Polymers demonstrate compliance with critical safety standards



## An emerging market seeks to build customer confidence

According to a 2024 report from Research and Markets, the market for chemically recycled plastics is predicted to experience “remarkable growth” and reach more than \$18 billion USD by 2030 with a combined annual growth rate of 5.08%.

The acceleration in the market for chemically recycled plastic is due to a confluence of factors, starting with the global need to reduce reliance on fossil fuels. Many consumers, investors and regulators and manufacturers are shifting away from a single-use economy to the concept of a circular economy that transforms the idea of waste into a viable new resource stream.

But beyond a desire for a greener tomorrow, the greater availability of chemically recycled plastics is due to technical innovations by manufacturers that yield recycled plastics that perform up to the same standards as virgin plastic, at price points bearable by original equipment manufacturers (OEMs).





## Helping ensure that chemically recycled plastics perform up to expectations

Because chemically recycled plastics are newer, manufacturers of these materials need to show that they can reliably demonstrate compliance to relevant standards.

ELIX Polymers is a Spain-based manufacturer of plastics and resins used by OEMs in heavily regulated industries including healthcare, automotive and consumer products. The company's customers have high standards for safe performance in real-world conditions and ELIX has previously attained various ISO certifications for its plastics, resins and derivatives.

With interest in growing the circular economy, ELIX and many of its customers are also interested in shifting from virgin to chemically recycled thermoplastics. Additionally, some ELIX customers wanted to use recycled plastic in white or lighter colors that could only be achieved through chemical recycling. This is why the company has ventured into chemically recycled Acrylonitrile-Butadiene-Styrene (ABS) plastics.





## ELIX Polymers stands out with UL Solutions Yellow Card certification

Through the UL Solutions Plastic Recognition Program, also known as Yellow Card™, plastics manufacturers can promote the safety and quality of their products to existing and potential customers. Yellow Card products may feature the UL Recognized Component Mark which demonstrates compliance with relevant fire protection, electrical and mechanical hazard standards by plus ISO or IEC requirements.

Yellow Cards, along with the White Card international extension, offer an opportunity for plastics manufacturers to connect with OEMs in search of appropriate materials via the easily searchable in the **Prospector®** and **UL Product iQ®** databases.

After a rigorous testing and certification process, ELIX’s chemically recycled ABS plastics earned the UL Recognized Component Mark and Yellow Card for its polymeric materials. “Having the Yellow Card has given us the ability to offer our customers more choices that meet their sustainability goals,” says Fabian Herter, marketing manager at ELIX Polymers. “The Yellow Card helps us add value by elevating the chemically recycled materials in our portfolio.”

As ELIX Polymers continues to develop its range of sustainable products, its customers can enjoy greater confidence when selecting chemically recycled ABS plastics.

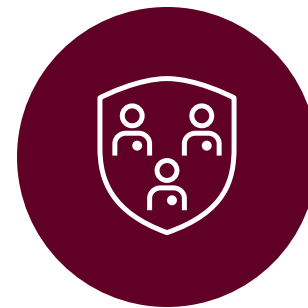
## UL Solutions helps ELIX Polymers support customer needs for recycled plastics

As the chemically recycled plastics market continues to grow, OEMs look to third-party reassurance regarding critical performance. UL Solutions, a trusted global safety science leader, has provided testing, certification and validation services to plastics manufacturers since 1941.

“When plastics manufacturers need to stand out in the marketplace and also provide additional confidence to their customers that more sustainable materials can actually perform as expected, independent testing is absolutely critical,”

- **Hagen Fasel, Senior Product Manager at UL Solutions.**

Seasoned chemical engineers work closely with UL Solutions customers to clearly understand product, regulatory and market needs in newly emerging technical fields, such as chemically recycled plastic. Through its global testing network, UL Solutions helps provide substantiation that chemically recycled materials are appropriate for distinct applications and monitored at regular intervals to help ensure ongoing reliability.



## How plastics manufacturers can engage with UL Solutions

This longtime UL Solutions customer plans to continue to pursue certification for its growing array of sustainable plastics offerings.

“We chose UL Solutions because of its reputation and expertise with plastics materials. It’s the main player in the industry — and a partner we recommend to industry peers.”  
- **ELIX’s Herter, Marketing Manager at ELIX Polymers.**

If you would like to learn more about chemically recycled plastics, UL Solutions testing and certification services and the Yellow Card program, please contact us at [UL.com/Solutions](https://www.ul.com/Solutions).



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