Recycled plastics certification and performance testing for chemical and renewable content

Science-driven safety and sustainability services for the plastics industry

Quality, transparency and trust in chemically recycled plastics

In today's world, where raw material shortages and the shift towards a circular economy have driven the demand for sustainable plastics, our plastics certification and performance testing services enable you to demonstrate that your plastic compounds meet safety requirements and can serve as a viable alternative to virgin, fossil-based plastics — whether they contain chemical recycled, mass-balanced or renewable content.

Original equipment manufacturers (OEMs) continue to make commitments to reduce the carbon footprint of their companies and products. These initiatives work to address global warming challenges and align with the global goal of achieving Net Zero Carbon. More and more, OEMs are searching for renewable energy sources, optimized transportation services and redesigned products with UL Certified and validated recycled or renewable materials.

If you're a material manufacturer who needs to respond to those OEM demands with new materials that contain mechanically recycled content, chemically recycled content or renewable content, engaging with UL Solutions chemical recycled plastics safety certification (UL Solutions Yellow CardTM) and performance testing program can help get you ahead in the game. UL Standards define requirements for products with safety-critical functions, including:

- Fire protection
- Electrical risks
- Mechanical hazards

Increase your end-product's safety by using recognized polymer compounds through our world-renowned Yellow Card certification program. With expertise extending to polymer compounds containing chemical recycled content or renewable materials and more, we cater to the evolving needs of material manufacturers in North America, Europe and Asia.

Five advantages of working with UL Solutions

Our proven, science-driven services can help boost your recycled plastics company's production, profitability and trust.

Benefit from:

Globally recognized safety standard-certified compounds

Certifying plastic compounds containing chemical recycled content or mass-balanced content to renowned safety standards such as UL 94, the Standard for Tests for Flammability of Plastic Materials for Parts in Devices and Appliances, and UL 746A, The Standard for Polymeric Materials - Short Term Property Evaluations, demonstrates that sustainable plastics comply with fire, electrical and mechanical hazard mitigation requirements. With safety certifications published on the trusted Yellow Card, you'll have the confidence to use recognized compounds in applications where those hazards exist.



Our science-driven services provide proven, transparent solutions that can help boost your recycled plastics company's production, profitability and trust.

Faster return to production and profitability

With UL Product iQ®, our innovative, searchable digital database, recycled plastic manufacturers can easily access information about certified compounds, facilitating streamlined product development and decisionmaking.

Ways to lower your products' carbon footprint

Performance testing services from our Engineered Materials team can support both your R&D stage and quality control process. Information about high-quality compound production for use in end-product applications, including new plastics and chemicals, can help you replace fossil-based counterparts and reduce dependence on crude oil imports.

Added value, boosted transparency and enhanced trust in your recycled plastics

Our Environmental Claim Validation for chemically recycled plastics can be uniquely combined with our safety certification to help support and speed your overall sustainability journey.

Global market access with only one certification process

Our White Card™ extends the Yellow Card to international standards such as IEC and ISO, which can help you showcase your products to the global market.

Reach your safety and sustainability potential

Our expert-led safety certification and sustainable attribute validation support you along the whole material and product development chain:

- Material selection via Product iO
- Performance testing as part of the certification process or to support your R&D process
- Safety certification, including publishing the Yellow Card and White Card on Product iQ
- Demonstrate the accuracy of your sustainability claims with an Environmental Claim Validation (including publishing on the SPOT® database)

Trust us to provide the certifications and validations that can give your chemical recycled, mass-balanced or renewable content plastics a competitive edge in the market. With UL Solutions, you'll find a place where safety and sustainability can go hand in hand. Connect with our Recycled Plastics experts and learn more today.

Please visit UL.com/ChemicalRecycling

