

Packaging solutions

UL Solutions holistic approach to packaging for all consumer products industries

According to Esko's Packaging Trends 2022 report, packaging represents an essential component of any product as it gains increased attention among stakeholders, including manufacturers, retailers, supply chain partners and consumers. Driven by the growth of e-commerce, global supply chain complexity and changing consumer preferences, product packaging represents a critical element of delivering safer products to market and building on customer loyalty.

Our International Safe Transit Association (ISTA) Certified Testing Laboratory tests your product packaging to the requirements necessary to earn an "ISTA® Transit Tested Certification Mark." This certification will give you and your retailers increased confidence that your goods will arrive minimizing product damage during transit. In addition, in a world facing threats like climate change and limited natural resources, many manufacturers strive for sustainable as well as functional packaging. UL Solutions provides comprehensive services for package testing.

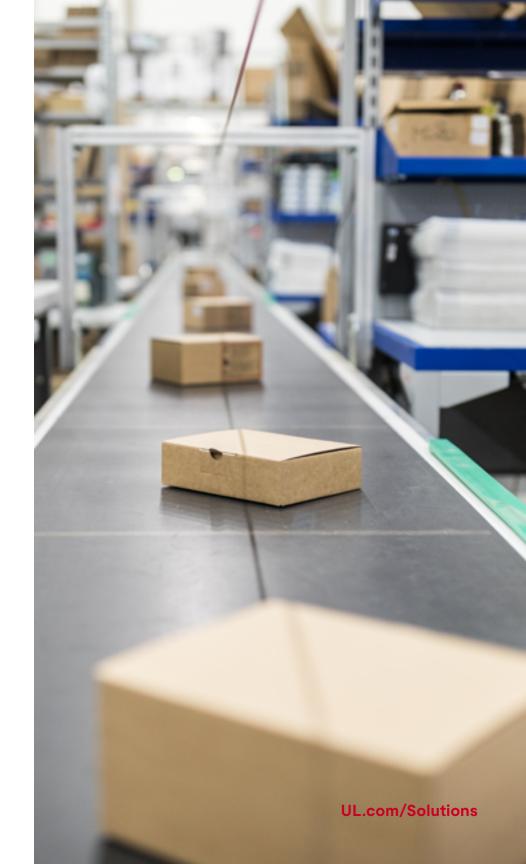
Imperative: Protect

Developing a holistic packaging program can help you protect:

- Shipped goods
- Consumers
- The environment
- Your brand reputation

UL Solutions offers end-to-end packaging testing solutions to address material testing, packaging performance, sustainability and chemical content challenges. Consider us the ideal partner to accompany you on your path toward safety, quality, compliance and an increasingly sustainable approach to packaging.

We offer performance and mechanical testing to specific standards like ISTA, Technical Association of the Pulp and Paper Industry (TAPPI), ASTM D4169, packaging chemical analysis and sustainability solutions.





Let UL Solutions evaluate your comprehensive packaging program

Do you need to assess your packaging's physical-mechanical performance?

UL Solutions' performance testing helps you avoid the most common packaging failures, including physical/material defects and labeling failures. We offer customized testing for your brand requirements, including testing according to:

- ISTA series
- Amazon APASS ISTA 6 Amazon Ships in Product Packaging (SiPP) or ISTA 6 Amazon Overbox (Tier 3)
- Custom profiles
- ASTM D4169, Standard Practice for Performance Testing of Shipping Containers and Systems
- (TAPPI) Standards
 - TAPPI T804 Compression of Cartons
 - TAPPI T810 Bursting Strength of Packaging
 - TAPPI T811 Edgewise Compression Strength

What about chemical safety?

Paper and packaging materials may contain chemicals either intentionally to achieve specific performance goals or unintentionally due to contamination or impurities. UL Solutions provides a wide portfolio of chemical testing, performing tests in line with your target markets' current legislation. In our global network of chemical laboratories, we test:

- Heavy metals according to Toxins in Packaging Clearinghouse (TPCH) & Packaging Directive 94/62/EC
- Model Toxics in Packaging Legislation for PFAS & Phthalates
- Bisphenol A and other Bisphenols content
- Short-chain chlorinated paraffins (SCCP) and flame retardants according to Persistent Organic Pollutants (POP) Regulation 2019/1021
- Polycyclic aromatic hydrocarbons (PAH), phthalates, dimethyl fumarate, flame retardants according to REACH Regulation 1907/2006
- Substances of very high concern (SVHC) on the Candidate List of substances subject to notification and communication obligation according to REACH Regulation 1907/2006

Does your packaging come in contact with food?

If so, it is important that chemical migration does not increase risk to human health or alter food composition. UL Solutions offers a series of chemical analysis, testing and advisory services such as:

- EU Directive 10/2011
- Specific migration and determination of the total content for various substances, heavy metals or of primary aromatic amines (PAA)
- FDA Food Contact Article Testing
- 21 CFR 177 series testing for polymers
- 21 CFR 176.170 for paper
- Global migration to different food simulants
- Sensory testing
- Labels and warnings assessment
- Risk assessment
- Testing protocol development for your target markets
- Supply chain management solutions and related documentation



How can more sustainable packaging contribute to your circularity strategy?

Packaging has an enormous impact on the environment.

The UN Sustainable Development Goals (SDGs) have gained unprecedented adoption among companies worldwide. The SDGs urge companies to focus their attention on the sustainability and performance of their product packaging. Sustainable packaging plays a critical role in achieving several SDGs, including SDG No. 12, Responsible Consumption and Production; SDG No. 14, Life Below Water; and SDG No. 15, Life on Land. In addition, you may want to communicate your sustainability efforts with your end consumer in a transparent way. UL Solutions offers:

- · Environmental Claim Validation for recycled content, recyclability rate and more
- UL Environmental Product Declaration (EPD)
- Product Carbon Footprint Verification Program to verify that the carbon footprint of packaging meets industry standards such as ISO 14067
- ECOLOGO® Certification for plastic packaging

For more information or to request a quote, contact us today at sustainabilityeu@UL.com or UL.com/packaging

