Comprehensive support for product stewardship and life cycle assessment



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The transition to the circular economy is underway.

Manufacturers are recognizing sustainability as a key driver of their success.

Are you ready to rise to the challenge?

Confidence in products and packaging





More sustainable materials and supply chain transparency



Chemical management services and software



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Shifting from a linear economy to a circular economy

Global regulators are calling for a transition from the take-make-waste cycle of consumption to a circular economy. In the circular model, products are designed to be durable and made using renewable materials. Those materials are returned to the production process at end of product life.

To meet these imperatives, manufacturers and brand owners must recognize sustainability as a key driver of business success, take greater accountability for the impacts of their product portfolio, and rise to the challenges of product stewardship and extended producer responsibility.

These challenges include:

- Understanding how the escalating regulatory environment will impact your product portfolio.
- Implementing necessary changes across the extended enterprise to manage ongoing compliance.

To transition to a circular model with greater confidence, manufacturers and brand owners benefit from partnering with a trusted provider.

UL Solutions can help you develop holistic policies to demonstrate compliance with regulatory and retailer/channel partner requirements. We offer services and software that make it easier to identify sustainable opportunities throughout the value chain and benefit people, planet and product. Our independent testing, certification, verification and validation programs help you demonstrate to regulators, retailers and consumers that your sustainability claims can be trusted.

• Transitioning to ingredients and materials that advance sustainability while maintaining high product quality and performance. Collecting and communicating chemical information throughout the value chain to meet restricted substance compliance requirements. Adopting processes leading to circularity.



Develop chemical management policies that support business objectives, protect employee and consumer safety, and enhance brand reputation

How UL Solutions can help

- Restricted substances testing and advisory services
- ULTRUS[™] WERCS Studio Chemical Data and Compliance Management



Meet criteria for retailer/institutional buyer programs that offer marketing benefits to manufacturers and brands that use alternative products, materials and inputs with substantiated environmental claims

How UL Solutions can help

- Environmental Claim Validation (ECV)
- Environmental product declaration (EPD) certification
- Packaging testing and certification
- ECOLOGO[®] Certification
- ULTRUS[™] PurView[®] Product and Supplier Scorecard
- ULTRUS[™] Prospector[®] Material Discovery
- UL Product iO[®]
- UL SPOT Product Database



How UL Solutions can help

- ECOLOGO[®] Certification

- UL Product iO[®]

Screen your product portfolio and supply chain to identify areas of risk of social, environmental, health and safety impacts

- Environmental Claim Validation (ECV)
- ULTRUS[™] PurView[®] Product and Supplier Scorecard • ULTRUS[™] Prospector[®] Material Discovery
- UL SPOT Product Database
- Restricted substances testing and advisory services
- ULTRUS[™] Safety Data Sheet (SDS)
- Authoring and Labeling Software
- ULTRUS[™] WERCS Studio Chemical Data
- and Compliance Management



Access comprehensive data about ingredients, materials and packaging throughout the supply chain and over the life cycle

How UL Solutions can help

- ULTRUS[™] PurView[®] Product and Supplier Scorecard
- ULTRUS[™] Prospector[®] Material Discovery
- Restricted substances testing and advisory services
- ULTRUS[™] ChemADVISOR[®] Regulatory Database



Communicate progress toward sustainability and circularity goals

How UL Solutions can help

- Environmental Claim Validation (ECV)
- Environmental product declaration (EPD) certification
- Packaging testing and certification
- ECOLOGO® Certification
- ULTRUS[™] WERCS Studio Chemical Data and Compliance Management



How UL Solutions can help

- UL Product iQ[®]
- UL SPOT Product Database

Understand and comply with regulatory requirements of customers around the world

Packaging testing and certification

 Restricted substances testing and advisory services • ULTRUS[™] ChemADVISOR[®] Regulatory Database

Confidence in products and packaging

UL.com/ProductStewardship

The challenge

To comply with escalating global requirements, manufacturers must find trusted suppliers that offer more sustainable materials and packaging.

The opportunity

Seek materials with third-party certification or verification of the claims made. Independent certification of products, materials and packaging helps demonstrate that materials, products and packaging meet requirements for sustainability, safety and performance. Additionally, independent validation services help prove that products live up to the environmental claims their manufacturers make and can help increase consumer confidence and brand credibility.



What we offer

Environmental Claim Validation (ECV)

Using materials and packaging with substantiated environmental claims can help you demonstrate that you satisfy regulator or retailer requirements and stand out to consumers in a crowded marketplace.

UL Solutions offers independent, data-driven validation for an array of environmental claims including:

- Zero waste to landfill and landfill waste diversion
- Recycled content (post-consumer, pre-consumer/ post-industrial or total recycled content of a product)
- **Bio-based content**
- Compostability and biodegradability
- Rapidly renewable content
- Paper-based products recyclability
- Mold resistance
- Polyvinyl chloride (PVC) free
- Byproduct synergy
- Innovative environmental claims without existing protocol

The UL Environmental Claim Validation Mark can be added to products and packaging to communicate validated sustainability attributes.

Environmental product declaration (EPD) certification

An EPD is a summary of the life cycle assessment (LCA) for a product, from material extraction to production, shipping, consumption and disposal. EPDs transparently summarize the LCA of a product in a single, comprehensive report, enabling easy comparison of environmental impacts of like products.

UL Solutions is a leading ISO 14025 program operator for independent, third-party verification of EPDs. We can produce EPDs for global markets, and we have mutual recognition agreements in place with several other EPD program operators, offering a single-source provider experience and greater exposure for your products.

Packaging testing and certification

Packaging material and waste are subject to a growing array of global regulations at the country, region and local levels. Major retailers are creating incentive programs, including Amazon Climate Pledge Friendly and Target Zero, for brands that choose more sustainable packaging. To comply with regulations and qualify for retailer programs, major brands are moving toward packaging that minimizes or eliminates the use of plastic in favor of fiber-based materials.

We offer safety, sustainability and performance testing to evaluate the quality and compliance of packaging and labeling. We serve a wide array of industries, including appliances, beauty/personal care, consumer electronics, general merchandise, lighting, textiles/ apparel/footwear and others. Our areas of expertise include:

- Physical and performance testing.
- Chemical and microbiological testing, including testing for heavy metals, per- and polyfluoroalkyl substances (PFAS) and bisphenol A (BPA).
- Food contact materials testing, including testing for heavy metals, peroxyacetic acid (PAA) and compliance with global regulations.
- Sustainability evaluation, including recycled content validation, product recyclability, carbon footprint and product life cycle.



ECOLOGO[®] Certification

For manufacturers and retailers that want to showcase that their products meet a comprehensive set of environmental, health and social criteria, our ECOLOGO® Certification program can help. ECOLOGO® Certification is based on multi-attribute sustainability standards for products and services across their life cycle. ECOLOGO® Certification indicates a product or service has undergone scientific testing and assessment for compliance with third-party environmental standards for a range of criteria, including materials, energy, manufacturing and operations, human and environmental health, product performance and use, packaging, labeling, and corporate practices, and product stewardship and innovation.

ECOLOGO® Certification is recognized or referenced in hundreds of specifications, standards and purchasing programs, including (but not limited to):

- Amazon's Climate Pledge Friendly Program.
- Walmart's Built for Better Program.
- U.S. Environmental Protection Agency (EPA) Federal Purchasing Program.
- Leadership in Energy and Environmental Design (LEED) certification.

More sustainable materials and supply chain transparency

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The challenge

Manufacturers and brand owners must rise to the increasingly rigorous chemical compliance demands of partners, regulators, nongovernmental organizations (NGOs) and consumers, including:

- Extended responsibility policies addressing the material issues that comprise sustainability over the total product life cycle.
- Regulatory requirements focused on environmental safety and biodegradability.
- Initiatives driving manufacturers to reduce the use of pollutants, achieve carbon neutrality and reduce the overall environmental impact of manufacturing processes.

The opportunity

Increased supply chain transparency is key to advancing the sustainability of your product portfolio.

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What we offer

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ULTRUS[™] PurView[®] Product and Supplier Scorecard

Retailers and brand owners use ULTRUS[™] software to thoroughly evaluate products, components and ingredients based on key product attributes through our PurView® Product and Supplier Scorecard. PurView[®] enables retailers and brand owners to:

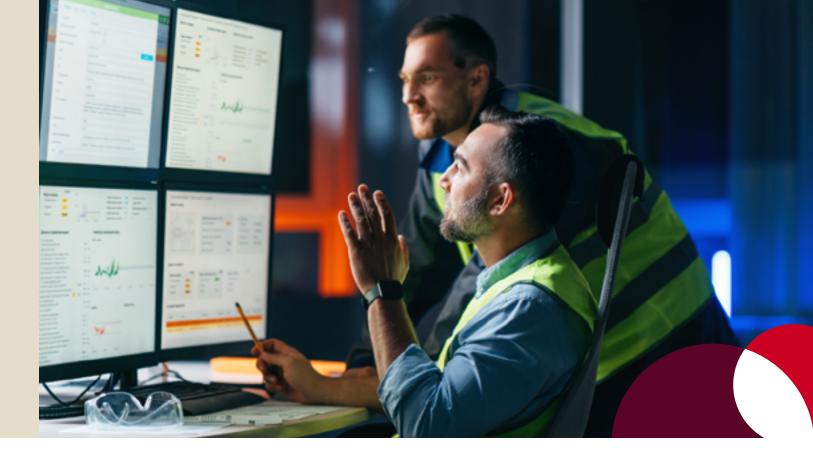
- Screen ingredients based on enterprise chemical policies.
- Evaluate ingredients, input materials and manufacturing processes for sustainability and social responsibility.
- Choose and develop healthier and more sustainable products to build trust with customers/channel partners and differentiate in the market.

• Identify chemicals of concern based on validated attribute data.

ULTRUS[™] Prospector[®] Material Discovery

Leveraging more than 20 years of experience in serving the world's top manufacturers, ULTRUS[™] Prospector[®] Material Discovery software enables manufacturers to find materials for your innovative products and grow your market share. Prospector contains information about 260,000+ materials across 10 industries. With Prospector, you can:

- View materials from global suppliers based on specific product development needs.
- · Search by keyword, manufacturer or product name.
- Request samples, review technical documentation and contact suppliers directly.



UL Product iQ®

Our product sourcing and certification database empowers users to access information (including sustainability details) for thousands of UL Certified products, components and materials. With Product iQ, you can verify UL certification of products and components, locate UL Solutions guide information and search for alternative certified products. Our advanced search features enable you to compare products, search by testing standards and more.

UL SPOT Product Database

Our comprehensive, credible and collaborative product search database helps users find sustainability attributes, certifications and other information about more than 130,000 products.

Chemical management services and software

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The challenge

To maintain compliance with frequently changing chemical regulations, manufacturers and brands must be equipped to effectively screen their supply chain, identify problematic and restricted substances, make more sustainable choices, and communicate risk throughout the supply chain.

The opportunity

Diverse stakeholders require proof of compliance with chemical regulations through robust technical files and independent testing and certification.

UL Solutions offers data management software purpose-built for the chemical supply chain and chemical testing tailored to manufacturers' unique product portfolios.

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What we offer

Restricted substances testing and advisory services

UL Solutions leverages our expertise to help organizations meet the requirements of a wide range of restricted substances regulations, including:

- Restriction of Hazardous Substances (RoHS) 2 and 3 (phthalates) for electrical and electronic equipment, including United Arab Emirates (UAE) RoHS regulation.
- · Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Substances of Very High Concern (SVHC), Article 33, and Restrictions, Article 67.
- EU Persistent Organic Pollutants (POP) Regulation.
- California's Safe Drinking Water and Toxic EnforcementAct of 1986 (also known as Prop 65).
- EU Medical Device Regulation (MDR).
- Canadian Prohibition of Certain Toxic Substances.
- Inventory of Hazardous Materials (IHM) for Ships.
- Waste Electrical and Electronic Equipment (WEEE) Directive.

Our holistic restricted substance management offering helps manufacturers, brands and retailers to gain greater visibility and control over their supply chain. Our full range of services includes restricted substances testing and advisory services, as well as restricted substances list (RSL) policy, training, test data management, control of restricted substances and validation of products that do not contain restricted substances.

ULTRUS[™] Safety Data Sheet (SDS) Authoring and Labeling Software

UL Solutions offers configurable and flexible tools to help businesses of all sizes meet increasingly complex compliance requirements and streamline SDS creation, management and distribution. Our software and services can help you to:

- Create, manage, translate and distribute compliant hazard communication documentation such as SDSs and chemical hazard labels for countries around the world.
- Proactively manage the environmental, health and safety aspects of your materials and chemicals to help reduce risks to people and the environment.
- Meet global environmental, health and safety (EHS) standards and support your chemical compliance and data management activities, including SDS authoring and distribution, hazard labeling, material management, report creation and workflow management.
- Screen your product portfolio for chemicals of concern and restricted substances and develop action plans that prioritize products based on risk.



ULTRUS[™] WERCS Studio Chemical Data and Compliance Management

ULTRUS[™] software helps simplify compliance data automation and centralization with the industry-leading WERCS Studio chemical compliance management and enterprise SDS authoring software. Our software supports your efforts to establish and enforce your chemical management policies. It provides access to access comprehensive product and material data necessary for improved decision making and supply chain transparency to help you meet regulatory compliance obligations, mitigate risk and facilitate global market access.

We offer advisory services to support your compliance and sustainability activities. Our experts can help you streamline the creation and maintenance of chemical registration and establish chemical management policies that reflect your organization's product stewardship goals.

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ULTRUS[™] ChemADVISOR[®] Regulatory Database

Our chemical regulatory database provides a single source of substance-specific data points needed for hazard assessment and product compliance around the world.

ULTRUS[™] ChemADVISOR[®] Regulatory Database provides chemical-level regulatory data and content needed to generate safety data sheet (SDS) and labels, and it enables compliance with occupational, environmental, health and safety regulations. The database is accessible as a datafeed, through our online web access, API data access portal or for use in SAP[®] Product Compliance when creating SDSs.

ChemADVISOR[®] contains chemical substances and more than 8,000



regulatory data on more than 600,000 regulatory lists from over 130 countries.



Why choose **UL** Solutions to support you in advancing product stewardship?



We have 40 years of experience in supporting customers with their product stewardship and chemical data management needs.



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We offer more than 20 years of experience in measuring and reporting sustainability-related data to applicable standards

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As a global leader in applied safety science, we rigorously adhere to principles of objectivity and observation that lead to discovery and innovation. Through our investments in new laboratories and strong relationships with energy transition and decarbonization leaders, UL Solutions is part of a worldwide network of future-forward scientific excellence. When you partner with UL Solutions, you're collaborating with industry experts who work every day to help businesses enhance the sustainability of their product portfolio, improve supply chain transparency and make progress in their contribution to a circular economy.

Our independent verification programs help businesses make trustworthy chemical compliance sustainability claims.

Backed by 130 years of history delivering on trust and safety, our ULTRUS[™] software helps customers achieve their regulatory, sustainability, supply chain and safety goals.



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