



One of the most effective strategies to manufacture a product safely and responsibly, while reducing chemical risks, is to shift the focus from the finished product (the production output) to the formulations and chemicals used in the manufacturing process (the production input).

Chemical safety in consumer products

Concern over chemical safety in consumer products has risen drastically in the past 20 years. Many countries and regions have established regulations to restrict toxic chemical substances in consumer products in order to protect customers.

Meanwhile, toxic substances pose hazards to people and to our living environment as well. This awareness of environmental impact and product end-of-life keeps growing in the community of lawmakers and the general public. UL's chemical safety services can help untangle the complicated map of regulation across the world.

The restriction of toxic substances covers a broad range of consumer product categories available in markets, including but not limited to:

- Toys and juvenile products
- Textiles, apparels and footwear
- Fashion accessories
- Home textiles
- Home accessories

- Food contact materials
- Electrical and electronic products
- Promotional premiums
- Cosmetics
- Packaging materials

Chemicals as consumer products on their own

People often encounter chemicals in consumer products in their daily lives without realizing it. Liquids, gels, pastes and powders are just a few examples. If these kinds of mixtures are not properly formulated or produced, they may pose an even more serious threat to consumers than other types of products due to their more direct and prolonged exposure.

Consumers can be harmed from exposure of hazardous substances in chemical products by:



Inhalation





Shifting from making a safe product to making a product safely

Though the compliance of a finished product still is a must according to most of the regulations governing restricted substances, the use of safer input chemicals is paramount to make the production sustainable. Proper control on input chemicals is fundamental to help guarantee the compliance of the whole production to legal requirements, but it also can lead to a more protected environment, a safer workplace and a more sustainable industry with the final goal of eliminating the use of hazardous substances



Why UL for chemical safety

When it comes to chemical safety in consumer products, UL can provide you with:

Technical services

UL is equipped with state-of-theart laboratories worldwide offering the following services to assist manufacturers in safeguarding their products against hazardous substances:

- Toxicological Risk Assessment (TRA)
- Labeling review
- Component evaluation
- After shipment surveillance
- Testing on raw materials, input chemicals and finished product.

Sustainability solutions

Sustainability solutions UL endeavors to be a customer focused partner to help facilities to implement best practices of chemical management, with key elements illustrated below:

- Chemical purchase policy
- Chemical Inventory
- Risk assessment and control
- Chemical communication including Safety Data Sheet (SDS) and labeling
- Personal protective equipment
- Chemical storage
- Chemical waste and disposal
- Emergency preparedness

In case of any restricted substances found in the finished product or other environmental control measures, UL's expertise can provide consultation to investigate the root cause of such failure, including the identification of the sources of restricted substances.

Global regulatory support and testing program development

UL has well established solutions for companies willing to understand the impact of global regulations on products they are importing or manufacturing in the different regions around the world.

Our regulatory research team closely monitors the developments starting from legal drafts to enacted regulations within and after transition periods and is maintaining a worldwide regulatory database.

UL can help customers in developing holistic solutions to evaluate critical control points at different production stages.

Through the qualified technical team, UL can support companies working in the consumer business in highly valuable activities, such as protocol development, definition of a testing program and regulatory interpretations.

UL technical employees are also active members of several technical working groups (ISO, CEN, ASTM) working in the field of standardization. Our technical team is ready to reply your questions to guide you through strategic business decisions on regulations, already published or in draft directives, test methods and future standardization developments.



For more information, visit <u>CRS.UL.com</u> or contact us at <u>QAinfo@ul.com</u>.



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