Develop textile/leather chemical safety and sustainability processes with expert training

Learn how UL supported North African companies in increasing their chemical management skills with UNIDO and ZDHC.

For many different reasons, a high number of chemicals are used in the fashion manufacturing process, such as anti-mold and bacteria-killing agents or water repellents in footwear and clothes. Dyes for coloring clothes and apparel are also potentially hazardous chemicals. Consumers wearing such apparel can run the risk of skin irritation and allergies, and unless adequate health and safety protections are in place, workers can be exposed to hazardous substances as well. Additionally, bodies of water around manufacturing facilities are at risk of being damaged when chemicals are not adequately managed, affecting biodiversity in these areas.

By partnering with UL, manufacturers can develop chemical management processes and procedures to implement a systematic approach to procuring, storing, using and disposing of chemicals within their facilities. A chemical management system helps you demonstrate compliance with safety and environmental policies and control and is key for tracking chemical products from procurement through final disposal and, eventually, reuse. It can also help achieve United Nations (UN) targets for Sustainable Development Goals (SDGs).

The sound management of chemicals contributes to achieving a number of specific targets of the Sustainable Development Goals:[1]

Ensure healthy lives and promote well-being for all at all ages

Target 3.9 - Reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination

Ensure access to water and sanitation for all

Target 6.3 - Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

Build resilient infrastructure, promote sustainable industrialization and foster innovation

Target 9.4 - Make infrastructure and industries sustainable

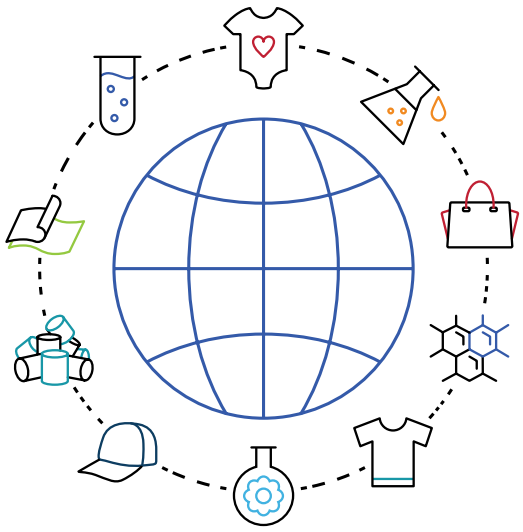
Make cities inclusive, safe, resilient and sustainable

Target 11.6 - Reduce cities' environmental impacts

Ensure sustainable consumption and production patterns

Target 12.4 - Achieve environmentally sound management of chemicals and all wastes

When used properly, chemicals can help provide and manufacture heat, power, consumer goods, processed food and clothing. They are a significant contributor to global economies and, as the standard of living improves, a country's use of chemicals substantially increases.



Chemical control refers to the management and regulation of chemicals in the early stages of the life cycle of chemicals, before and when they are placed on the market. This can include, for example, classification and labelling requirements for providing information regarding the safe handling of chemicals, potential hazards and necessary precautions as well as disseminating this information down the supply chain. Bans and restrictions on the production and use of certain chemicals are an even stricter form of management.

Benefits of a chemical management system

The ultimate benefit of the sound management of chemicals is the achievement that such chemicals are produced and used throughout their life cycle in ways that lead to the minimization of adverse effects on human health and the environment. The sound management of chemicals includes:

- Prevention
- Remediation
- Minimization and elimination of risks[2]

Chemical management helps address new and existing chemicals in a comprehensive manner and ensures that information on chemicals is available for governments to support the identification of possible risks to human health and the environment. It also promotes the prevention of pollution at the source.

According to the U.S. Environmental Protection Agency (EPA)[3], an effective chemical management system can help manufacturers save money. The cost of chemical management ranges from 1 to 3 dollars for every dollar of chemicals purchased. Therefore, a facility purchasing $1 million in chemicals is spending an additional $1 million to $3 million managing them. These high costs are due to expenses incurred as a result of using chemicals, such as compliance, safety, disposal and floor space.

The EU already has sophisticated chemicals laws in place, but global chemicals production is expected to double by 2030. The already widespread use of chemicals will also increase, including in consumer products. The European Commission published a chemicals strategy for sustainability on Oct. 14, 2020, as part of the EU's zero pollution ambition, which is a key commitment of the European Green Deal[4].

Following an update to the Measures for the Environmental Management Registration of New Chemical Substances, the Chinese Ministry of Ecology and Environment has recently added 255 substances to the China Existing Chemical Substance Inventory.

UL's work with the UN

UL worked with the United Nations Industrial Development Organization (UNIDO) to deliver the official Zero Discharge of Hazardous Chemicals (ZDHC) training modules under the SwitchMed Program. Funded by the EU, the SwitchMed Program focuses on speeding up the shift toward sustainable consumption and production patterns in the Southern Mediterranean through circular economy approaches. Led by UNIDO, actors along the textile value chain in Egypt, Morocco and Tunisia have received technical assistance to build local capacities to help eliminate hazardous chemicals from the textile production.

"The collaboration with UNIDO and UL in North Africa has enabled us to share our knowledge, guidelines and solutions with manufacturing facilities to further develop their chemical management system. The engagement of the facilities, the trainer's expertise and the pilots' approach serve as an example of how powerful multi-stakeholder initiatives can be in moving a regional industry into a more sustainable future."

— Mariella Noto - Implementation Senior Manager at ZDHC Foundation

The project started in June 2020 and will proceed through 2021. UL is delivering online sessions to present ZDHC training in both French and English to more than 120 employees from 35 textile and leather companies in Egypt, Morocco and Tunisia. Participants include industry manufacturers, international brands operating in these countries and relevant government representatives.

Participants from these sessions highly rated their experience.

- 87% of participants rated UL's trainers highly on their ability to provide prompt and appropriate feedback on activities as well as questions from the audience.
- 86% of participants rated UL's trainers highly for making clear the purpose and practical importance of ZDHC and chemical management.
- 82% of participants rated UL's trainers highly for presenting course content in a way that encouraged them to learn more about the subject.

Why UL?

Trainers all over the globe are available to provide the training sessions in your location and language. We have eight laboratories in the Asia Pacific, Europe, Middle East and Africa regions that have been granted provisional acceptance for testing in connection with the ZDHC Gateway – Wastewater module as well as two facilities in Italy and India that can also perform analysis in accordance with ZDHC Leather Wastewater Guidelines Addendum.

To learn more, visit our website at ul.com/news/zdhc-training-helps-brands-deliver-commitments.
To schedule a training or speak to a chemical management expert, contact us at Apparel@ul.com.

[1] *https://www.un.org/sustainabledevelopment/*
[2] *https://www.oecd.org/chemicalsafety/benefits-from-implementing-a-chemical-management-system.pdf*
[3] *https://archive.epa.gov/epawaste/hazard/wastemin/web/html/cms.html*
[4] *https://ec.europa.eu/environment/strategy/chemicals-strategy_en*

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