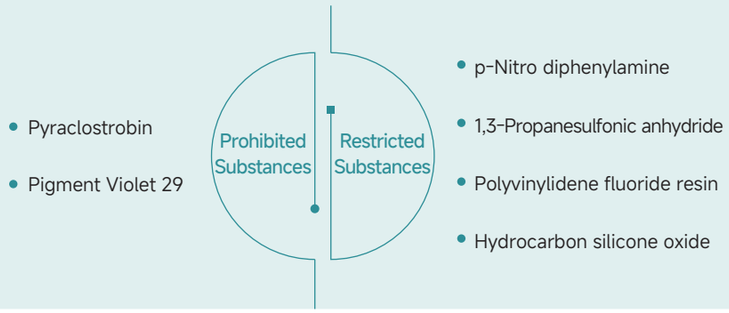
Green Chemicals

Luxshare Precision is proactively advancing full lifecycle chemical management across our operations. Through close collaboration with suppliers, we rigorously control chemical substances present in manufacturing processes and product compositions, striving to minimize environmental and human health risks associated with chemical usage.

Lifecycle Management of Hazardous Substances

We continuously monitor evolving domestic and international regulations on hazardous substance management, as well as client requirements for restricted substances. This includes compliance with the *Stockholm Convention on Persistent Organic Pollutants;* the *EU REACH Regulation* (Registration, Evaluation, Authorization, and Restriction of Chemicals) and its Substances of Very High Concern (SVHC) list; the *EU RoHS Directive* (2011/65/EU, 2015/863/EU) and its amendments; the *EU POPs Regulation* (2019/102/EU); the *EU WEEE Directive* (2002/96/EC); the *California Safe Drinking Water and Toxic Enforcement Act of 1986;* and *China's Volatile Organic Compounds (VOCs) Emission Standards.* Through systematic identification and control of regulatory risks of all chemical substance in processes and products, during the reporting period we updated the *Restricted Substances Management Specifications for Materials and Finished Goods* to Version 36 in 2024, which now defines 80 prohibited substances, 276 restricted substances, and 83 declared substances.

Part of Newly Added Prohibited and Restricted Chemical Substances



We have established a hazardous substance management system spanning the entire product lifecycle, aligned with the Hazardous Substance Process Management (IECQ-HSPM) framework. This system enables risk identification and tiered control of all chemicals present in products and associated manufacturing processes.

Whole Process Management of Hazardous Chemical Substances in Products

Product Development

- We apply the *Principles of Green Chemistry* and follow guidelines like the *General Principles for Ecological Design of Products* and the *Management Standards of Restricted Substances of Materials and Finished Products*. From the feasibility analysis stage to the product design stage, we comprehensively incorporate life - cycle environmental impact assessments into our considerations. We carefully evaluate the potential health and environmental impacts of products during their usage and disposal phases. Thus, we actively adopt harmless chemical compositions and support the hazardous substance free (HSF) philosophy. In addition, our product design specifications and material lists clearly convey the strict environmental standards of our organization

Material Procurement

- We require suppliers to declare the full substance composition of materials through the GP module of the GSCM system and provide the necessary inspection reports. The specialist is responsible for reviewing the environmental protection materials submitted by suppliers to ensure that they always comply with the company's high standards for hazardous substance management, thereby guaranteeing the compliant inflow of materials from the source. A comprehensive identification and supervision process has been established during the procurement process, achieving 100% coverage of all chemicals used in products.

Incoming Material Inspection

- Luxshare Precision comprehensively identifies the risks of hazardous substances in raw and auxiliary materials of different materials and conducts hierarchical management. According to the material properties and risk levels of raw and auxiliary materials, we set corresponding test items and frequencies. For all incoming materials, we adhere to the principle of "no acceptance for non-conforming products" and strictly control the incoming material inspection process. The laboratory systems of the company's main production bases have been equipped with statistical process control functions. Abnormal values of substance concentrations will automatically trigger warnings, effectively improving the efficiency of managing the stability of incoming materials.

Process Control

- In order to prevent cross-contamination during manufacturing processes, our assessment takes into account the possibility of dangerous compounds in machinery and equipment, tools, and auxiliary materials that may come into direct or indirect contact with the product during its manufacture. Before we adopt corresponding preventive measures, we regularly test the harmful substances in auxiliary materials and semi - finished products to avoid the pollution of harmful substances in the manufacturing process.

Finished Product Assurance

- Prior to shipment, we conduct random sampling inspections on finished products. We verify their compliance before affixing environmental labels and providing material composition statements and test reports as regulations and customer requirements. This ensures conformity with clients' standards and relevant legal statutes. Moreover, we disclose full formulations of products and the potential impact assessments through product labels, client portals, International Material Data System, China Automotive Material Data System, and other third-party platforms as requested.

Proactive Management of Prohibited and Restricted Substances

During the revision of the *Management Standard for Restricted Substances of Materials and Finished Goods*, we systematically identified emerging risk factors and formulated internal mitigation strategies. For chemicals not yet formally regulated but with potential hazardous properties, we implemented proactive controls by pre-emptively integrating these substances into our prohibited and restricted substance lists, establishing compliance thresholds ahead of current regulatory requirements.

List of Prohibited and Restricted Substances Managed Ahead of Regulatory Requirements

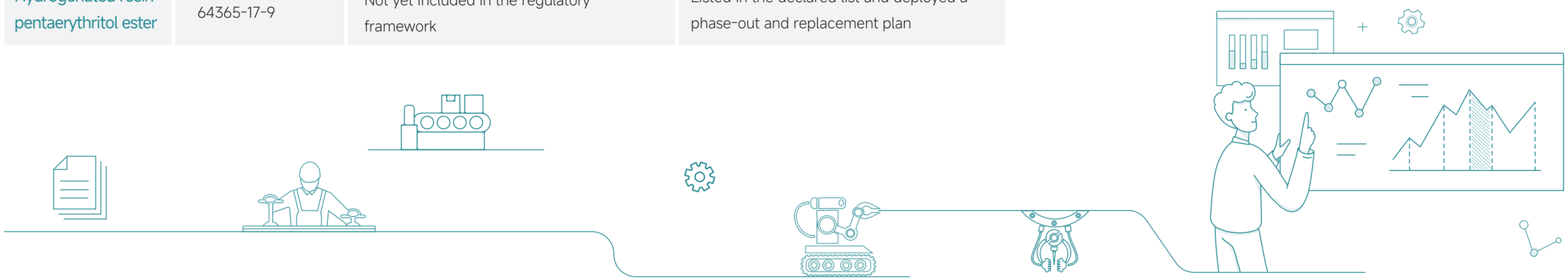
Restricted Substance	CAS No.	Regulatory Requirement	Internal Management Requirement
Medium-chain Chlorinated Paraffins (MCCPs)	85535-85-9	REACH SVHC List	Included in the restricted list
Pigment Violet 29	81-33-4	Toxic Substances Control Act (TSCA) - First Batch of Risk Evaluation Substances	Included in the prohibited list
2,4-Di-tert-butyl phenol	96-76-4	Not yet included in the regulatory framework	Listed in the declared list and deployed a phase-out and replacement plan
p-Cresol and DCPD Butylated Products	68610-51-5	Not yet included in the regulatory framework	Listed in the declared list and deployed a phase-out and replacement plan
2,6-Di-tert-butyl -p-cresol	128-37-0	REACH CoRAP List	Listed in the declared list and deployed a phase-out and replacement plan
Hydrogenated rosin pentaerythritol ester	64365-17-9	Not yet included in the regulatory framework	Listed in the declared list and deployed a phase-out and replacement plan

Phase-out and Substitution of Hazardous Substances and Outcomes of the Endeavor

Luxshare Precision has established the long-term plan to phase out all chemicals of concern. We closely monitor the latest developments in domestic and international regulations, align with the most stringent standards of key global clients, and continuously identify opportunities to enhance our restricted substance management. By formulating and actively advancing a series of hazardous substance phase-out initiatives, we are committed to discovering and adopting safer alternatives to reduce the reliance on substances of concern.

Case | Luxshare Chuzhou Implemented Hazardous Substance Phase-out for Eco-Conscious Cable Product Advancement

During production processes, auxiliary materials containing PFAS posed potential contamination risks. Despite no regulatory mandate requiring PFAS phase-out, Luxshare Chuzhou proactively initiated substitution protocols based on risk management principles, preempting future compliance requirements. Through systematic process risk assessments, our team identified PFAS presence in acetate cloth and conductive cloth used for specific cable products. We actively conducted material substitution screening, performing comprehensive evaluations of environmental compatibility and technical feasibility. This led to the successful replacement of PFAS-containing materials with certified PFAS-free alternatives, effectively mitigating contamination risks.



Schedule and Implementation Progress of Hazardous Substance Phase-out and Replacement Plans

Scheduled Phase-out/ Replacement Year	Substance (Substance Group)	Affected Materials/ Product	Progress/Status
2019	Lead and Its Compounds	Copper Alloy Materials	Full Replacement
2019	Antimony Trioxide	Wires/Cables	Full Replacement
2021	VOC	Cleaning Agents	Partial Replacement
2022	Decabromodiphenyl Ethane	All Materials	Full Replacement
2022	Triphenyl Phosphate	All Materials	Full Replacement
2022	Tributyl Phosphate	All Materials	Full Replacement
2023	PFBS and PFBS-Related Substances	All Materials	Full Replacement
2023	PFHxA, its Salts, and PFHxA-Related Substances	All Materials	Full Replacement
2023	Endocrine Disrupting Chemicals (EDCs)	All Materials	Full Replacement
2025	Per- and Polyfluoroalkyl Substances (PFAS)	All Materials	Partial Replacement[18]
2029	Substances of Concern in Components/ Parts Exempted under RoHS Directive	All Materials	Partial Replacement

[18] Immediate phase-out implementation across all new products

Hazardous Substance Management Requirements of the Supply Chain

As the critical bridge connecting suppliers and clients, we recognize that communicating clear material requirements to suppliers is an essential prerequisite for delivering high-quality green products. To ensure the procurement of materials complying with regulatory requirements, we have integrated green product requirements throughout the entire supplier management lifecycle. By holding suppliers to the same stringent standards applied in Luxshare Precision's internal management systems, we drive continuous improvement in suppliers' hazardous substance management capabilities, thereby mitigating supply chain risks and advancing collective sustainability performance.

Hazardous Substance Management Requirements of the Supply Chain

Entry Conditions

- Require raw material suppliers to sign the *Letter of Guarantee for Environmental Protection* to ensure that raw materials, components, packaging materials, semi-finished products and finished products supplied to Luxshare Precision meet the management requirements of the Management Standard for Restricted Substances of Materials and Finished Products

Change Management

- Timely communicate with and require suppliers to complete self-inspection, feedback and confirm compliance within the prescribed time limit after the *Management Standard for Restricted Substances of Materials and Finished Products* is updated. Suppliers are required to proactively report changes related to raw material properties and other aspects in accordance with the relevant change management requirements of the Company. They should also provide relevant information and samples as appropriate, so as to effect the change in the supply upon approval

Regular Audit

- Conduct regular audits related to the control of hazardous substances, check the product ingredient list and third - party hazardous substance testing report, and send it to the Company's internal laboratory for hazardous substance testing to prevent the non - environmentally friendly materials and products from flowing into the Company's product chain

Replacement or Reduction

- Actively carry out the replacement or reduction of hazardous chemical substances, and phase out hazardous chemical substances or replace them with safer chemical substances as soon as practicable

Luxshare Precision has implemented the GSCM system's GP module to establish end-to-end digital management spanning from supplier material compliance controls to full substance traceability. In 2024, focusing on auxiliary materials posing direct or indirect product contamination risks, we improved the GSCM system to enable process-driven and systematic online management in pilot factories. This includes automated material requirement dissemination, digital submission of environmental compliance documentation, supplier hazardous substance audit workflows, and real-time update notifications. These enhancements have significantly optimized green procurement efficiency while ensuring stringent quality assurance.