



In a context where environmental challenges, performance, safety, and regulatory issues are intertwined, Eurofins has put in place a 3-step strategy to evaluate the safety of packaging coupled with testing under relevant conditions.

# Packaging Testing

Recent innovative packaging developments have predominantly revolved around different aspects of sustainability, such as recyclability, biodegradability, compostability, refillability, reusability and the use of biosourced materials or raw materials derived from renewable resources. These trends are being pushed by multiple drivers, starting with individual consumers being more eco-conscious, along with brands wanting to be more forward thinking and focusing on the 3 R's (Reduce, Reuse, Recycle). Eurofins network of companies supports clients' quality control and risk assessment management procedures in the design, reuse, and valorisation of packaging, from the resin stage to the final packaging and during the life cycle of the product. We are actively contributing to international working groups (e.g: CosPaTox consortium).





As outlined in Article 17 of the European Cosmetic Regulation (EU) No. 1223/2009, substances that may transfer from packaging into the formula of a product must not affect product safety. To ensure that cosmetic products are safe for human use, according to article 3 of Cosmetic Regulation, carrying out a safety assessment of cosmetic packaging is essential. To support this, guidelines on the use of relevant Food Contact Regulation to carry out such safety assessments and other key information to take into account have been published (Commission Implementing Decision 2013/674/EU, Cosmetics Europe Advisory Document, 2019). However, no standard procedures for cosmetic product assessment have been published.

Our team of qualified toxicologists, pharmacists and regulatory experts are dedicated to supporting customers to assess the safety and compliance of their cosmetic packaging, by:

- reviewing packaging material and regulatory documentation, provided by the packaging supplier, in accordance with the Packaging Advisory Document (Cosmetics Europe, 2019)
- checking conformities
- evaluating potential container-content interaction, e.g. migration
- developing a suitable analytical testing and safety assessment plan





## Analytical Testing

Our industry knowledge, technical expertise and strategically located network of testing facilities allows us to provide solutions that meet both compliance and legal and customer-specific requirements:

# Ensure Performance



### Physical Testing

- Climatic ageing
- UV and xenon ageing
- Packaging/product ratio
- Wall thickness measurement
- Head space and useful volume measurement
- “Easier to empty” check
- Resistance to dishwashing
- Efficiency of dishwashing

### Stability Testing

- Real time/accelerated aging
- Environmental cycling (freeze-thaw stability testing)
- Photostability testing (real time and controlled conditions)
- Period After Opening (PAO) determination

### Mechanical testing

- Compression resistance
- Perforation resistance
- Shock resistance
- Seams resistances
- Resistances after ageing cycles
- Minimal expectable resistance



## Analyses for Toxic Substances

including but not limited to:  
Heavy metals, VOCs, Bisphenol A, Phthalates, CMR, Substances listed for instance on appendices II or III, SVHC

## Food Contact Testing

- Worst-case-calculations
- Overall and specific migration
- PAH migration
- Heavy metals migration
- Detection and quantification of all packaging ingredients and Non-Intentionally Added Substances (NIAS)



## Plastics content measurement

### End of life recovery

- Energy recovery
- Compostability testing (EN 13432 ASTM D6400, in an industrial environment) comprises 4 tests
  - Chemical composition study
  - Biodegradability testing (ISO 14855)
  - Desintegration testing (ISO 16929),
  - Terrestrial ecotoxicity testing (OCDE 208)
- Compostability testing in a domestic environment (NF T 51800)





## Audit & Consulting

With a global network of auditors and consultants, Eurofins laboratories provide a wide range of Assurance Services in:

- **Certification:** accredited audits (UKAS) against BRC Global Standard Packaging and Packaging materials.
- **Audits:** Evaluation of the supply chain: packaging manufacturers, packaging materials suppliers, etc.
- **Consulting:** support to identify and assess both recycling solutions and suppliers of recycled materials.

Our highly skilled experts and our network of international accredited laboratories (DINCERTCO, ISO 17025...) are on hand to ensure that your packaging does not compromise the safety, quality or efficacy of your products. We support beauty brands and packaging suppliers to help achieve and exceed their sustainability commitments and goals, such as improved recyclability and using recycled materials.



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