

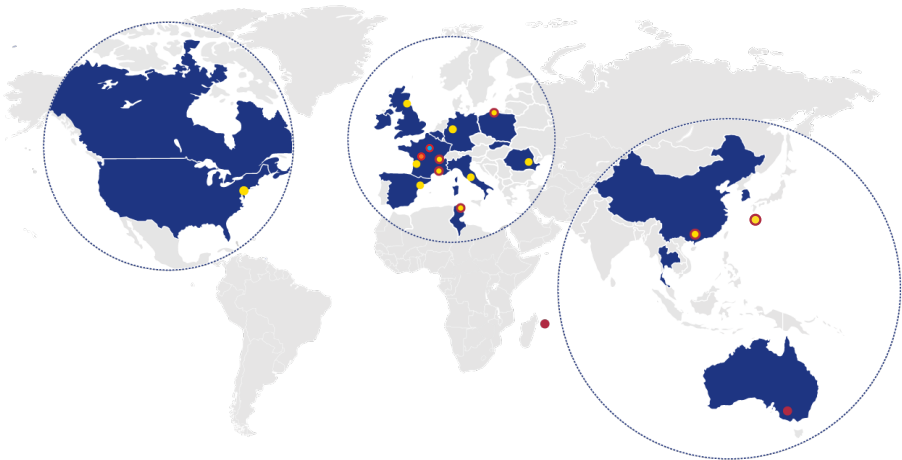


Hair Testing



Eurofins Cosmetics & Personal Care network of companies offers the latest testing facilities and techniques for determining the efficacy of hair care, supporting products claims and competitive.

We rely on a network of 19 labs and teams of experienced doctors, technicians and hairdressers to accurately test your products performance and safety.



- Hair Locks
- Clinical Studies
- *Ex vivo* Testing
- Emotions Studies

Eurofins Cosmetics & Personal Care laboratories provide biophysical testing, clinical testing and technical support to a range of clients including formulators, manufacturers, raw ingredient suppliers, retailers and brands for the hair care category.

We are specialized in hair, hair body, beard, eyelashes and eyebrows.





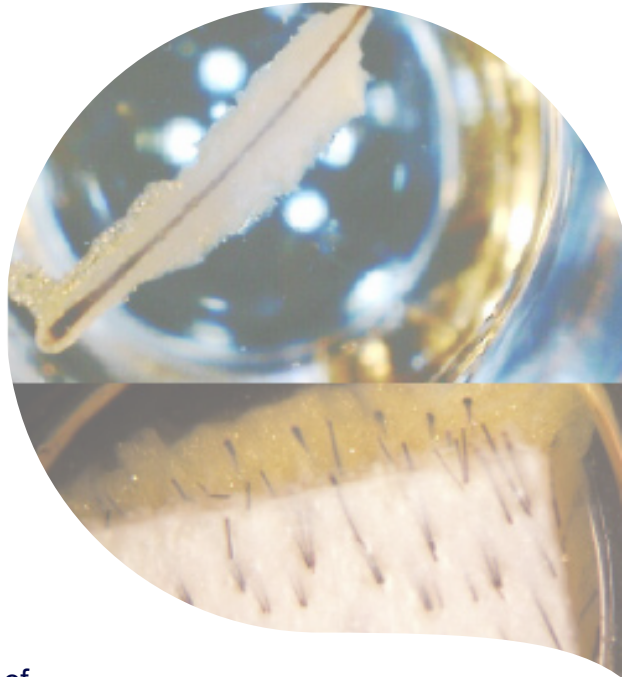
- Strengthening & Fortifying
- Repair (SEM observation or Lipid Penetration)
- Thermal / UV Protection
- Grey hair
- Brightness & Shine
- Volume
- Hair elasticity
- Clinical scoring on pictures
- Olfactive intensity
- Sniff test / scalp malodor
- Hair malodor
- Microbiome Testing
- Anti-Pollution - Cleansing and Protective – Hair & Scalp
- Scalp Hydration
- Redensifying
- Anti-Hair Loss / Hair Regrowth / Alopecia
- Hair straightening
- Antidandruff
- Oily Hair & Scalp Treatment
- Soothing
- Refreshing
- Scalp Microcirculation
- Relaxed Scalp
- Sensitive Scalp
- Rinsability
- Compatibility test (open-test)
- Acceptability test (in-use)
- Clinical examination (scalp, hair) and sensations of discomfort (itching, stinging, heating, burning, tightness...)
- Coupled studies: efficacy and safety
- Safety part under dermatological control
- Complementary studies / food supplements



Hair Locks Testing

- Grey hair
- Color Protection
- Hair Combing Wet and Dry
- Hair Coloring: quality, long-lasting
- Neutralization of unwanted highlights
- Bleaching
- Hair Curl Retention
- Fixing Power (heat / humidity / sweat / sea water resistance)
- Olfactive intensity
- Rinsability (High rinsability/ Saving-water product/ X liters of water saved)
- Anti-Pollution - Cleansing and Protective
- Hair Product Penetration - Nourishing (lipid penetration)
- Repair / UV Protection (SEM observation + score)
- Thermal Protection
- Hair Shine (Glossymeter®)
- Hair Colour Protection from UV exposition
- Hair Strength Improvement Anti-breakage
- Hair fiber protection against UV impact





Human scalp explants

- Healthy donors
- One donor: around 10 explants
- 1 to 3 explants per tested condition (several hairs per explant)
- Model suitable for any kind of tested product
- Model adapted to assess various dermo cosmetic claims
- Model well adapted to evaluate product protection against exogenous stress
- Pollution: Atmospheric pollution using Pollubox® (Heavy metals + Hydrocarbons ± Diesel particulate matter, Ozone, Cigarette smoke), Analyzed markers (Histology & transcriptomics : AHR, NRF2 pathways, Biochemical assay: MDA)

Isolated human scalp hairs

- Healthy donors or donors exhibiting alopecia
- One donor: around 100 isolated hairs
- 12 hairs per tested condition (each hair analysed separately)
- Sensitive model suitable for soluble products
- Model adapted to assess various dermo-cosmetic claims
- Model well adapted to evaluate hair growth



The Sound of Hair

Hair Tune® Device:

Able to characterise the 'sound signature' of the hair

Claims:

- Damaged
- Softness
- Dryness
- Salt Chlorine - Sand Protection
- Softness of beard

Emotional Methods



Mirror Test: Conscious & unconscious perception

- Structuration of free speech (Text mining)
- Prosody emotional (Weight)
- Physiological component (Heart rate variation, Mydriasis etc.)
- Behavior component (Facial expressions, gesture etc.)





Environmental Impact

- Ecotoxicity and biodegradability testing
- Eco-friendly packaging development
- Compostability testing
- Microplastics testing
- Rinsability
- Nanoparticules

Vegan Offer

- Toxicology and Regulatory Assessment
- Animal DNA Analysis
- On-site Audit
- Declarations of conformity / labelling

Refillable Solution

- Procedures for workers in shops and training
- Cleaning protocols
- Reusable packaging testing
- “Mystery” client audits and quality audits
- Quality control in shops

Physico-Chemical Analysis

Forbidden / restricted substances analysis

- 1,4-Dioxane
- Residual solvents (Benzene)
- Heavy Metals
- Allergens
- Siloxanes
- Formaldehyde
- Aminophenol
- Nitrosamines
- UV filters (for color shampoos)
- Phthalates
- Etc.



Clinical studies

- Evaluation of the quantity of water necessary for the foaming and the rinsability of a product (body and hair)
- Evaluation of the quantity of water associated with a well-defined water flow, of the water volume, of the time required
- Estimate the dose of use
- Calculate carbon impact

Hair locks - Instrumental protocol

- Test on natural hair
- Measurements of the rinsing time
- Calculation of the quantity of water used thanks to the control of the water flow

All these studies can also be carried out on body products.

Consumer tests

- Body & hair products
- Evaluation of perceived rinsability in different countries / regions (Europe, North America, Asia)
- Possibility of placing flow meters at the expert panelists
- Train hairdressers on rinsing standards (flow meters in salon)
- Qualitative approach upstream to understand consumer expectations “a product that rinses easily” + quantitative approach with the design of a questionnaire at home

