

Evidence Shows Cosmetics Contribute Only a Small Share to Urban Wastewater Micropollution



Multiple independent studies consistently show that cosmetics' contribution is minor, likely around **1–2% or less**. The frequently cited 26% figure is based on flawed data: banned substances, substances not used in cosmetics (e.g., the insecticide permethrin), and ubiquitous substances (e.g., common dietary fats) wrongly attributed to one sector.

What multiple studies consistently find

The EU's recast of the Urban Wastewater Treatment Directive: analysis of the scientific basis for identifying the cosmetic industry's contribution to the extended producer responsibility, Duis, K., Junker, T. & Coors, A., Environmental Sciences Europe (2026), commissioned by IKW

- Peer-reviewed scientific article in a reputable international journal on environmental sciences
- Provides a detailed analysis of how substances are actually used and realistically quantifies the impact of multi-use substances; refines more simplistic 100%/0% or 50%/50% scoring models.
- Estimates that cosmetics account for **1.4%** of the contribution to urban wastewater pollution, or 2.7% under a conservative assessment.



Review of Cosmetics Europe's analysis of the contribution of the cosmetic industry to the extended producer responsibility in the context of (EU) 2024/3019, ECT Oekotoxikologie GmbH, commissioned by Cosmetics Europe

- Reviews 20 highest impact substances originally allocated to cosmetics
- Concludes that allocation to the cosmetics sector as main source is justified only for 3, resulting in an estimated contribution from cosmetics of about **0.2%** - roughly 100 times lower than the 26% figure.



Extended producer responsibility of Cosmetic ingredients in wastewater, Danish Hydrological Institute (DHI), commissioned by L'Oréal

- Uses actual market data on cosmetic product and manufacturer-reported compositions
- Estimates that only **1.1%** of the wastewater toxicity comes from substances used in cosmetic products



Extended Producer Responsibility system for pollutants in wastewater. Review of the European Commission approach to allocating Toxic Load to cosmetics, Ricardo, commissioned by Cosmetics Europe

- Re-examines the key substances and introduces a conservative scoring model for multi-use substances (assigning cosmetics 50% of these substances' impact.)
- Even under such cautious assumption, reduces the originally estimated 26% contribution to app. **4.29%**, demonstrating a significant overestimation in the initial allocation.



Analysis of the JRC list of substances found in urban wastewater as used in the EPR feasibility report, Cosmetics Europe

- Re-examines substance allocation using CosIng database and actual cosmetic use under the Cosmetic Products Regulation (EC 1223/2009).
- Demonstrates that when allocation is based on genuinely the main or exclusive use of a substance in cosmetics, the total contribution of cosmetics to wastewater pollution is around **1.5%** not, 26%



Different methods, same conclusion:

When correctly allocated based on actual use, cosmetics make only a marginal contribution to urban wastewater micropollution

Where the 26% figure comes from & why it does not hold up to scrutiny

Feasibility of an EPR system for micro-pollutants, Bio Innovation Study

Part of the European Commission's Impact Assessment

- Assesses the contribution of cosmetics to urban wastewater micro pollution at 26%
- Overestimates the contribution of cosmetics by misallocating substances (banned or non-cosmetic) and assigning 100% of multi-use substances to a single sector.



"Our industry acknowledges the importance of urban wastewater management and is ready to contribute its fair share, but we cannot be incentivised to reduce emissions of substances we do not emit."

John Chave, Director General, Cosmetics Europe

For more details go to [Unpacking Flawed Data behind UWWTd](#)



Cosmetics Europe
the personal care association