

CosPaTox (Cosmetic Packaging Toxicology Consortium)

Safety Evaluation Guidance for the Use of Post-Consumer Plastic Recyclates (PCR) in Cosmetic and Detergent packaging

Dr. Taryn Kirsch, Procter & Gamble
October 17th, 2025

**E
X
C
E
R
P
T**

- 1 Groups of substances identified by GC/MS after extraction/migration testing of PE and PP recyclates
- 2 Results of the elemental analysis of PE and PP recyclates after digestion
- 3 Model use cases for common packaging types and product categories
- 4 Example exposure scenarios based on model use cases

Example exposure scenarios calculated based on the example use cases.

[illegible]

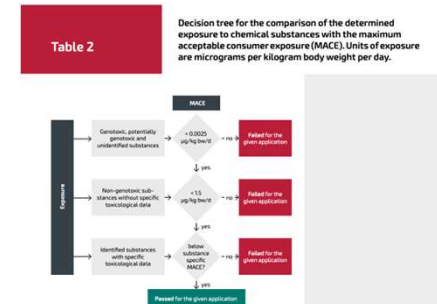
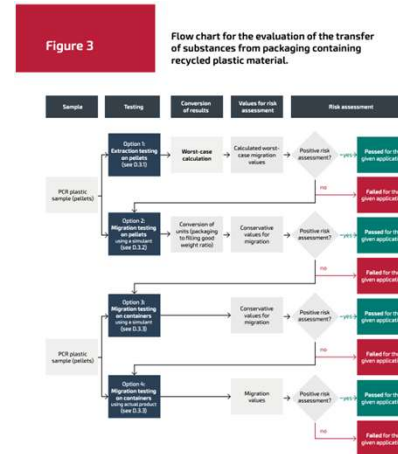
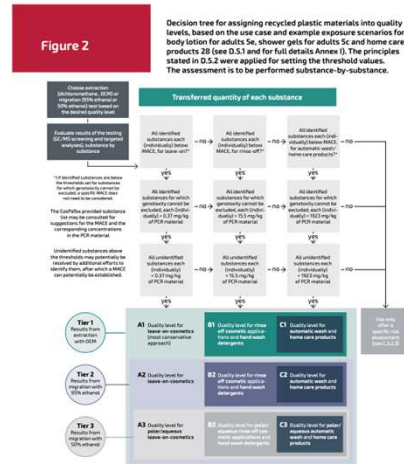
The CosPaTox Guideline – Key Recommendations are...

1 ...to apply a combination of material characterization, safety assessment and quality management

2 ...to categorize PE and PP recyclates into one of three quality levels which are based on model packaging use cases

3 ...to evaluate substances that may transfer from plastic into product based on the flow chart provided in the guideline

4 ...to base decision making on a comparison of exposure with toxicologically derived thresholds



CosPaTox is now a DIN Standard- DIN SPEC 91521

- DIN SPEC is a recognized specification process developed by the **German Institute for Standardization (DIN)**. It establishes **rigorous quality, safety, and performance criteria**, ensuring that products and services comply with industry-leading standards. DIN SPEC certifications are particularly critical for industries handling sensitive materials, such as healthcare, technology, and manufacturing.

Through a DIN Standard the goal of making the CosPaTox approach a CEN Standard is one step closer!

CosPaTox will be a powerful tool to ECHA

A	B	C
		
Call for evidence to inform a study on substances of concern in packaging and packaging waste		
Part C: Chemical Substances used in Packaging and packaging components in the EU/EEA		
How to complete this section		
Step 1 PLEASE PROCEED WITH ANSWERING QUESTIONS IN STEP 1.1 AND STEP 1.2	The worksheet 'Step 1.1 - Substance List' contains a table with a list of Substances possibly used in production of packaging materials and/or present in it. Please select (with an 'x') one or more substances if you know that they are: (a) present in packaging material; (b) used in the manufacturing of packaging, and/or (c) used in the downstream processing (e.g. recycling or waste treatment) of packaging.	The worksheet 'Step 1.2 - Other substances' contains a blank table where you can provide information on substances/mixtures or mixture not included in the previous list. If you use other substances that <u>do not appear</u> in the list provided in Step 1.1 Substance List tab, please add them to the sheet Step 1.2 - Other Substances tab Please provide information on substances that are (a) present in packaging ; (b) used in the manufacturing of packaging, and/or (c) used in the downstream processing (e.g. recycling) of packaging. IMPORTANT: please complete step 1 (step 1.1 and step 1.2) before continuing to step 2. /!\ If you have forgotten to report a substance once you have started to answer Step 2 questions, please <u>do not use Step 1.1. Substance list</u> as this may produce errors. To avoid this, simply add the substance you have forgotten in the list under 'Step 1.2 Other Substances' (even if the substance is present in the list provided under Step 1.1)

ECETOC Plastic Additives Task Force and the CosPaTox Approach



The ECETOC Plastic Additives Task Force was convened in September 2024 to respond to stakeholder concerns regarding exposure to chemical additives from plastic waste and recyclates.



While established risk assessment principles exist for certain sensitive uses, circular economy applications introduce additional complexities. Additives may degrade during processing or environmental exposure, creating new challenges for safety assessment.



This work aims to develop a practical framework that integrates existing tools and data to support risk-based decision-making across the plastic life cycle

The framework under development will:

- Distinguish between high-risk, low-risk, and uncertain scenarios.
- Support transparent decision-making by identifying data gaps and critical assumptions.
- Be applicable not only to additives but to other substances in plastic and solid polymer matrices.
- The aim is to create a scientifically sound, usable tool for regulatory and industrial stakeholders aligned with circular economy goals.



**Thank you for your
attention**