

2-3.12.2025

Rome

# EU FOOD SAFETY FORUM

Supporting the Food Safety Systems  
of the future

2-3.12.2025

Rome



[www.foodsafetyplatform.eu](http://www.foodsafetyplatform.eu)

in



# Screenfood – Chiara Portesi

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SCREENFOOD

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The develops metrology tools for food safety monitoring in circular economy settings.

- ✓ How can advanced food safety metrology enhance risk detection and management during the transition to circular food production?
- ✓ What impact will this have on consumer trust and regulatory compliance?



## Measures in the EU to make the economy circular



### The European Green Deal (2019)

- A set of policy initiatives by the European Comission
- Overarching aim of making EU climate neutral in 2050



### Circular Economy Action Plan (CEAP)

One of the main building blocks of the European Green Deal



Packaging and Packaging Waste Regulation (PPWR)  
Law to inforce the prevention and reduction of packaging waste.



## Packaging and Packaging Waste Regulation (PPWR)

The Packaging and Packaging Waste Regulation entered into force on **February 11, 2025**.

### Objectives:

- **Prevent and reduce** packaging waste, including through more reuse and refill systems.
- Make all packaging on the EU market **recyclable** in an economically viable way by 2030.
- **Safely increase** the use of recycled plastics in packaging.
- **Decrease the use of virgin materials** in packaging and put the sector on track to **climate neutrality by 2050**.
- Fostering the **transition to a circular, sustainable and competitive economy**.

### Law - the new rules include:

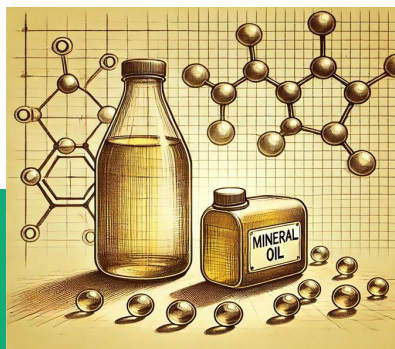
- Restrictions on certain **single-use plastics**
- Minimizing the **weight and volume** of packaging and avoiding **unnecessary** packaging.
- **2030 and 2040 targets** for a minimum percentage of recycled content in packaging.
- A requirement for take-away businesses to offer customers the **option to bring their own containers** at no extra cost.
- Minimizing **substances of concern**, including restrictions on packaging containing **per- and polyfluorinated alkyl substances (PFAS)** if they exceed certain thresholds.





## Project Overview

The overall aim of ScreenFood is to develop reference methods and reference materials for providing food and food packaging industries with metrological tools for being compliant to legislation, ensuring safety of products and preventing economic losses



Mineral Oils



PFAS



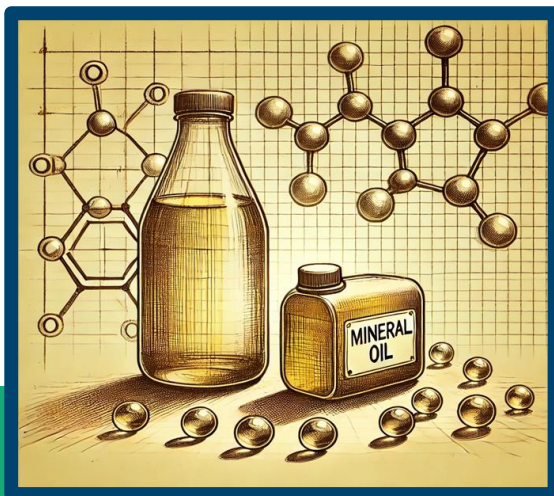
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Screening

Advanced food safety metrology, as developed by Screenfood, enhances risk detection and management by focusing on precision, standardization, and the ability to detect emerging threats specific to circular systems.





To improve protocols for the quantification of MOAH with a focus on (3+MOAH), including food matrices not covered in the development of ISO/DIS 20122.

### Enhancement

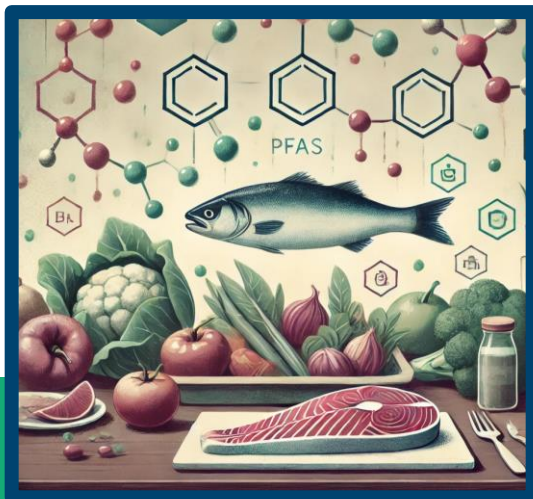
### Impact on Risk Management

### Precision in Risk Detection

Directly targets chemical risks associated specific contaminants, ensuring that dangerous substances are quantified accurately, even at low levels.

- 2 ILC organized
- comprehensive video training for the proper application of the LC-GC-FID procedure





To develop sensitive analytical procedures for detecting and quantifying per- and polyfluoroalkyl substances (PFAS) in selected matrices



Metrological approach for PFAS quantification



Emerging PFAS quantification (USC)

## Enhancement

## Impact on Risk Management

### Precision in Risk Detection

Directly targets chemical risks associated with specific contaminants, ensuring that dangerous substances are quantified accurately, even at low levels.

Analytes: PFOS, PFOA, PFBA, PFBS, PFDA, PFHpA, PFHxA, PFHxS, PFNA, PFPA, GenX, PFPeA, PFUnDA, PFDoDA, PTrDA, PTeDA, PFPS, PFHpS, PFNS, PFDS, PFUnDS, PFDoDS, PTrDS, FOSA + DIPAPSmix produced within the project

Target LOQ: 0.001-0.004 µg/kg (EU 2022/1431)





Enhancement

Impact on Risk Management

**Harmonization and Traceability**

Food safety data **consistent** and **reliable** across the **global supply chain**



**MOSH/MOAH**

Mineral oil neat solutions

Rapeseed oil



**PFAS**

Tomatoes

Cereal base baby food



To develop traceable and highly accurate reference materials for quality control and quality assurance purposes.



## Enhancement

## Impact on Risk Management

### Emerging Threat Screening

Proactive management of **unknown risks** introduced by novel processes and materials, preventing systemic issues.

- Focus on:
- PFAS and EOF
  - Bisphenols- Inorganics
  - Test materials for harmonization
  - New approaches for migration studies



Develop screening methods addressing new/existing organic and inorganic contaminants, in virgin and sustainable packaging.



## Impact on regulatory compliance

The project's foundational objective is to create **harmonized and internationally recognized standards**. This directly supports regulatory compliance:

### Establishing a Common Language:

Enabling Demonstrable Compliance

Simplifying Trade:

Providing scientifically robust,  
internationally agreed-upon  
measurement standards that regulatory  
bodies can adopt and enforce.



## Impact on regulatory compliance

The project's foundational objective is to create **harmonized and internationally recognized standards**. This directly supports regulatory compliance:

Establishing a Common Language

**Enabling Demonstrable Compliance:**

Simplifying Trade

Equipping the food and packaging industries with the validated analytical tools and reference materials needed to consistently measure contaminants, prove their materials meet **safety thresholds**, and **comply with directives** concerning recycled packaging.



## Impact on regulatory compliance

The project's foundational objective is to create **harmonized and internationally recognized standards**. This directly supports regulatory compliance:

Establishing a Common Language

Enabling Demonstrable Compliance

**Simplifying Trade:**

Standardized metrology **reduces technical barriers to trade**, allowing safe, compliant food and materials to flow freely across regions operating under circular economy models.





## Impact on consumers trust

The goal of improved metrology is to create metrological confidence in the safety of circular food production. This bolsters consumer trust by:

- **Guaranteeing Safety:** scientific assurance that **potential contamination** risks associated with recycling are not only being **monitored** but are being **quantified** with the **highest** possible.
- **Promoting Transparency:** Reliable, standardized data allows for **transparent reporting** on food and material safety
- **Validating Sustainability Claims:** By **reliably** separating safe, circular practices from unsafe ones, the system validates sustainable claims, assuring the public that the pursuit of environmental goals is not coming at the expense of public health.



## 2<sup>nd</sup> stakeholders workshop

Please register here



Reference Materials and Reference Methods in Support of Food Safety –  
Strategies and Action at EU Level



## THE CONSORTIUM



## COLLABORATORS



# ScreenFood

[www.screenfood.eu](http://www.screenfood.eu)



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EUROPEAN  
PARTNERSHIP



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METROLOGY  
PARTNERSHIP



Coordinator  
Chiara Portesi

c.portesi@inrim.it

