

Identifying Plastics in Food Waste in Ireland

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Overview of Project on Plastics in Food Waste

RECOMMEND SOLUTIONS
TO ELIMINATE HIDDEN
PLASTIC IN FOOD WASTE

LABORATORY TESTING OF
PRODUCTS TO DETERMINE
IF THEY CONTAIN PLASTIC



LITERATURE REVIEW

ENGAGE WITH
STAKEHOLDERS

FOOD WASTE CHARACTERISATION
STUDIES TO IDENTIFY PLASTIC PRODUCTS



This project is funded under the EPA Research Programme 2021-2030. The EPA Research Programme is a Government of Ireland initiative funded by the Department of the Environment, Climate and Communications

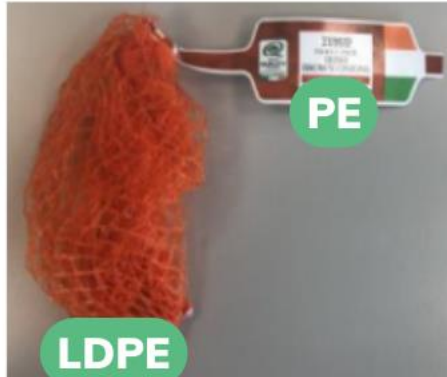


17%

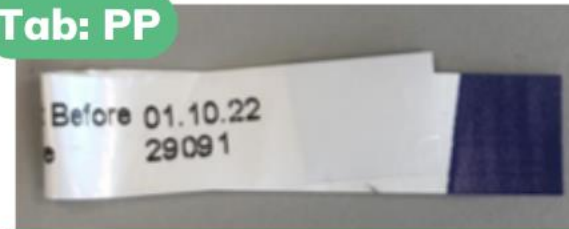
Household

A photograph of a waste sample on a grey concrete floor. The sample is a large, irregular pile of brown, crumbly organic material, possibly food waste or compost. To the right of the main pile is a smaller pile of similar material, and further to the right is a pile of colorful, crumpled plastic packaging. A small white rectangular label with the handwritten text "NO7 18/5" is placed on the main pile. The floor is dark and shows some stains.

9% Commercial



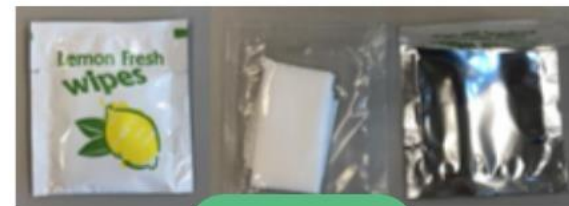
Tab: PP



Adhesive: MIXED POLYMERS

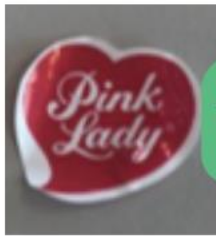


Adhesive: MIXED POLYMERS





Adhesive: MIXED POLYMERS
Ink: POLYESTER
Main Sticker: LDPE



Adhesive: MIXED POLYMERS
Main Sticker: LDPE



Adhesive:
MIXED POLYMERS



Top: PET, PE
Film: PP
Cup: PP, EVOH



Outside: PET
Inside PE



Overall Fibres: PP
Tab: PP
Absorbent Layer Fibres: PET
Inside: LDPE

Prevention / Designing Out in Products



Example where
open lid -
inside
seal opens
and is attached



SUP - tethered caps



Design Solution!



Remove advice
compostable
- put in dry
recycling bin



Chick-fil-A
Ask customers if they
want sachets



Paper
Bag



Cotton Nets
on market



Do we need them?
e.g. Flanders



Contamination Limit in Feedstocks

- Limits on plastics in final compost / digestate – too late at this stage!
- Technology are not 100% efficient in removing contamination
- Limits should be on:
 - Waste producer
 - Waste collector
 - Waste processor – at the gate
 - **Waste Framework Directive should encourage setting of limits in Feedstocks**
 - E.g. Germany & Austria looking at this in their legislation

One sample midway in compost process



Plastic Bottle Rings



Glass

Fruit Stickers

End of Project Workshop on Solutions

2nd February 2023- online

<https://us06web.zoom.us/meeting/register/tZAtc-uspjwuG9LJjCwD891OszlQogK96Ma7>

EPA Research 2030 is the ten-year high-level framework for the EPA's research programming (2021- 2030), designed to be agile, responsive and flexible. EPA Research 2030 thematic structure comprises four interconnected hubs (Addressing climate change needs, facilitating a green and circular economy, delivering a healthy environment, Protecting and restoring our natural environment) that bring an integrated and cross-sectoral approach, enabling holistic management and protection of our environment.

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