



# PLASTIC GUIDE

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**Bywaters**  
recycling made easy

# HELPING YOU UNDERSTAND PLASTIC

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At Bywaters, we are committed to finding solutions to maximise the amount of plastic entering our Materials Recovery Facility (MRF) in Bow that we send to reprocessors to be recycled. We are proud to have been awarded 'Plastics Recycling Business of the Year' at the 2019 Awards for Excellence in Recycling and Waste Management.

Although plastics make up less than 5% of the weight of materials we send to re-processors, plastics are complex to segregate correctly and efficiently due to the diversity of polymers, types, shapes and colours. It is therefore essential for our customers to understand which plastic materials are accepted in our MRF for us to recover as much recyclable material as possible.

Resin Identification Codes (RIC), often found on plastic packaging, defines the polymer the product is made from. However, it does not directly indicate how recyclable a material is and how suitable it is for our MRF.

Materials made out of the same polymer can vary in shape, type and colour. These criteria will determine how easily the material can be mechanically segregated and recycled. For example, PET used for drinks bottles is highly desirable for our recycling process as the plastic is of high quality and 3D items are sorted easily by our machinery.

Food packaging films can also be made out of PET (as well as PVC, PP, PS) but are of a much lower quality and hold less value when recycled. Plastic films and parcel strapping also cause issues in the sorting process as they often get caught up in machinery or end up mixed in with cardboard, causing contamination.

On the next page, we have created an infographic to help educate on the types of plastics out there.



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SYMBOL	POLYMER	COMMON USES	PROPERTIES	RECYCLABLE
 PETE	Polyethylene terephthalate	 Plastic bottles	Clear, strong and lightweight.	
 HDPE	High-density polyethylene	 Milk containers Cleaning agents Shampoo bottles Bleach bottles	Stiff and hardwearing; hard to breakdown in sunlight.	
 PVC	Polyvinyl chloride	 Plastic piping Vinyl flooring Carbon insulation Roof sheeting	Can be rigid or soft via plasticizers; used in construction, healthcare and electronics.	
 LDPE	low-density polyethylene	 Plastic bags, Food wrapping (e.g bread, fruit, vegetables)	Lightweight, low-cost, versatile; fails under mechanical and thermal stress.	
 PP	Polypropylene	 Bottle lids Furniture Houseware Medical Automobile parts	Tough and resistant; Effective barrier against water and chemicals.	
 PS	Polystyrene	 Food takeaway containers Plastic cutlery Egg tray	Lightweight; Structurally weak; Easily dispersed.	
 OTHER	Other plastics (e.g acrylic, polycarbonate, polyatic fibres)	 Water cooler bottles Baby cups Fibre glass	Diverse in nature with various properties.	

# CAN YOU RECYCLE IT



The On-Pack Recycling Label (OPRL) scheme aims to deliver a simple, consistent and UK-wide recycling message based on the % proportion of waste collectors that accept a certain material. OPRL labels are becoming more common in the UK and provide a good option for customers to determine whether an item can be recycled. If you are still unsure about certain items, you can contact us at [sustainability@bywaters.co.uk](mailto:sustainability@bywaters.co.uk).

## Can Bywaters Recycle it

The majority of plastics we recycle at our MRF are **PET (type 1)** and **HDPE (type 2)** bottles. These are of high quality and value and can be sorted easily through our mechanical segregation. We strongly recommend that customers place these in the dry mixed recycling (DMR) waste stream.

We also accept **some** of the following: **LDPE (type 4)**, **PP (type 5)**, **Solid PS (type 6)**, **Other (type 7)**

It is simpler to define the type of plastic we can recycle by product type rather than RIC polymer:



Plastic bottles, food tubs/trays, plastic cups, yoghurt pots and plastic bags **CAN BE RECYCLED** at Bywaters MRF.



PVC (type 3), expanded polystyrene (type 6), packaging heavily contaminated with food or oil, large items such as catering trays, car parts etc, parcel strapping, bubble wrap, strong films and black plastic **CANNOT BE RECYCLED** at Bywaters MRF.

If you generate large volumes of any type of plastic please let your account manager know, or contact [sustainability@bywaters.co.uk](mailto:sustainability@bywaters.co.uk) as we may be able to arrange a dedicated collection and recycling service for you

Bywaters can sort out many types of plastic, but ultimately we can only accept materials with existing and approved recovery facilities.

Bywaters regularly offer MRF visits to our customers and local residents so that they can see for themselves what is being recycled. Alternatively we also have a 360 degree tour of our facility online, please [click here](#) to view.