

PLASTICS INFORMATION SHEET

The world's annual consumption of plastic materials has increased from around 5 million tonnes in the 1950s to nearly 100 million tonnes today. We produce and use 20 times more plastic today than we did 50 years ago! The packaging sector accounts for 35% of UK plastics consumption and plastic is the material of choice in nearly half of all packaged goods. Plastics are still being developed and improved upon, for example, yoghurt pots have reduced in weight from approximately 12g to 4g in the last ten years.








■ Benefits



- ▲ Extremely versatile and can be tailored to meet very specific technical needs.
- ▲ Light weight; reducing fuel consumption during transportation.
- ▲ Extremely durable.
- ▲ Resistant to chemicals, water and impact.
- ▲ Good safety and hygiene properties for food packaging.
- ▲ Excellent thermal and electrical insulation properties.
- ▲ Relatively inexpensive to produce

■ Types

There are about 50 different groups of plastics, with hundreds of different varieties. In theory all plastics can be recycled but will depend on the available technology and markets for the recycled material. A standard marking code exists to help consumers identify and sort the main types of plastic. The various types and their most common uses are:

	PET	Polyethylene terephthalate - Fizzy drink bottles and oven-ready meal trays.
	HDPE	High-density polyethylene - Bottles for milk and washing-up liquids.
	PVC	Polyvinyl chloride - Food trays, cling film, bottles for squash, mineral water and shampoo.
	LDPE	Low density polyethylene - Carrier bags and bin liners.
	PP	Polypropylene - Margarine tubs, microwaveable meal trays.
	PS	Polystyrene - Yoghurt pots, foam meat or fish trays, hamburger boxes and egg cartons, vending cups, plastic cutlery, protective packaging for electronic goods and toys.
	OTHER	Any other plastics that do not fall into any of the above categories. - An example is melamine, which is often used in plastic plates and cups

■ Manufacture

The production and use of plastics has a range of environmental impacts.

- ▲ Requires significant quantities of resources, primarily fossil fuels, land & water
- ▲ Produces waste and emissions
- ▲ Involves the use of potentially harmful chemicals, which are added as stabilisers or colorants, for example phthalates.

■ Disposal

The disposal of plastics products also contributes significantly to their environmental impact. Because most plastics are non-degradable, they take a long time to break down when landfilled, possibly hundreds of years. Plastic waste, such as plastic bags, often becomes litter. For example, nearly 57% of litter found on beaches in 2003 was plastic (ENCAMS).

■ Recycling

A report on the production of carrier bags made from recycled rather than virgin polythene concluded that the use of recycled plastic resulted in the following environmental benefits:

- ▲ Reduction of energy consumption by two-thirds
- ▲ Production of only a third of the sulphur dioxide and half of the nitrous oxide
- ▲ Reduction of water usage by nearly 90%
- ▲ Reduction of carbon dioxide generation by two-and-a-half times

■ FAQs

What plastics can I recycle in West Sussex?

Currently, residents can recycle **plastic bottles only**. Most bottle shaped items are made from PET, HDPE or PVC.

Why can't I recycle non-bottle shaped items like margarine tubs, yoghurt pots, food trays etc?

These items are not suitable for recycling as they are: not clean and often contaminated with food; made from low grade plastic which is low in value. Such items are often made from a blend of plastics which are difficult to separate and therefore recycle. In West Sussex, we do not currently have the reprocessing technology to be able to recycle such items.

What do the symbols on the bottom of plastic items mean?

See the table on page 1 for the most common types of plastic. This system of identification was produced by the American Society of Plastics to make sorting and thus recycling easier. The recycling logo does not necessarily mean the plastic item can be recycled in West Sussex or by other local authorities.

Where does the plastic we send for recycling end up?

After plastics are collected from the householder, the material is sorted at a 'Materials Recovery Facility' into the different types. Plastics are then sent off to be:-

Reformed - whereby the plastic is melted down and reformed into new material e.g. fibres for fleeces, pillows or new plastic bottles.

Reprocessed - whereby more brittle plastics are transformed into new plastic products such as recycled plastic furniture. Much of the plastic cannot be reprocessed in the UK and often needs to be exported to foreign markets where there's greater demand for such items; providing a stable market for recycled material.

What type of materials does my plastic get recycled into?

Plastics can be recycled into all kinds of materials, including polyethylene bin liners and carrier bags; PVC sewer pipes, flooring and window frames; building insulation board; video and compact disc cassette cases; fencing and garden furniture; water butts, garden sheds and composters; seed trays; anoraks and fleeces; fibre filling for sleeping bags and duvets; and a variety of office accessories.

What is the future for plastics recycling?

It is likely that in the future, more and more plastics will be recycled in West Sussex as new technology becomes available to sort and reprocess the materials. A new Materials Recovery Facility will allow the different types of plastic to be sorted and dealt with more efficiently.

