



Polyethylene terephthalate – Fizzy drink bottles and oven-ready meal trays



High-density polyethylene – Bottles for milk and washing-up liquids.



Polyvinyl chloride – Food trays, cling film, bottles for squash, mineral water and shampoo



Low density polyethylene – Carrier bags and bin liners.



Polypropylene – Margarine tubs, microwaveable meal trays.



Polystyrene – Yoghurt pots, foam meat or fish trays, hamburger boxes and egg cartons, vending cups, plastic cutlery, protective packaging for electronic goods and toys



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.

PET and HDPE are two plastics easily recycled in the UK; most plastic bottles are made of one or the other

Oil and Gas are finite resources which need to be conserved. Both are used when creating plastics. Products which use a lower proportion in their composition compared to the plastics they replace are a good way of extending the resources we have left. Polypropylene is a good example of this (see later page for better explanation of polypropylene)

PVC

PVC is one of our most valuable and versatile plastics, it can be made rigid or flexible, in any colour or finish. Unfortunately there are more problems with recycling PVC than any other plastics, mainly due to the by-products given off when burning it (e.g. chlorine) and also it has a heavier dependency on fossil fuels in its creation than some other plastics.

Recycling has the advantage of reducing landfill and the associated rising costs and retaining the resource of the polymer.

However, there is no equivalent to the waste paper recycling infrastructure which works extremely efficiently in the UK. As individual companies and organisations must make their individual arrangements, the minimum quantities required for recycling often make this impracticable.

Large organisations who can collate the tonnage required are the best for opting for recycling.

The product that seems most widely recognised as a 'green' product is polypropylene - read on for more information

Why polypropylene?

Polypropylene satisfies all four EU criteria for assessing the environmental impact of a material. Minimal use of natural resources, reduced emissions, long working life and optimal reuse/long working life.

Environmentally-friendly

Before polypropylene was invented, the gaseous waste from oil such as propylene and ethylene were simply burned, because they were useless. Today, these gases are used to produce polypropylene, thus drastically reducing atmospheric pollution. The production process also eliminates the potential polluting of rivers, streams and lakes, due to the use of water in a closed cooling cycle.

Recyclable

The polypropylene used is entirely recyclable and meets the manufacturing requirements of the Environment Commission - these stipulate that there is a minimum use of natural resource, reduced emissions a long working life and optimum re-use.

There is a high demand for polypropylene for recycling purposes as it can be recycled more than 50 times without any reduction in strength. Recycled polypropylene has uses as car parts, furniture, pots and pallets separators.

Superior

As well as being the most durable and flexible material for making binders, folders and packaging, polypropylene is far more environmentally and economically sound than rival products such as standard plastics and PVC.

Polypropylene, unlike PVC, does not give off chlorine when burnt. It gives off only water vapour and carbon dioxide, which is converted by photosynthesis (chlorophyll). It is a chemically inert product. To incinerate some materials, extra fuel needs to be added. Polypropylene however, is destroyed simply by burning, because its calorific capacity is similar to that of oil. Thus incinerators economise on fuel and operate more efficiently.

Durable

Polypropylene products last much longer than those made from most similar materials. It is easy to wipe clean, hard wearing and will withstand extreme temperatures and ageing. Being more durable than alternative materials, products made from polypropylene don't need to be replaced as often. When used for packaging, boxes and cases often have a second 'life'. Saving cost, resources, our environment and our future.

It's worth noting that polyester (PET) is touted by many suppliers as an eco alternative because it is also generates low toxicity on production and is recyclable. However, there are no known UK recycling systems, whereas polypropylene is recycled on a local level, (an increasing consideration for environmentalists this as local recycling improves responsibility and lowers carbon creation.