What do the plastic numbers mean?

#1 Polyethylene Terephthalate (PET)



Polyethylene Terephthalate (PET)

A clear hard plastic often used as single-use food and drink containers such as water & pop bottles, vegetable oil containers, peanut butter containers, and some prepared frozen food containers.

Recyclability

Recycled polyethylene terephthalate is known as RPET and the most widely recycled plastic in the world.

- Fiber for carpet
- Fleece jackets, comforter fill, tote bags
- Containers for food, beverages (bottles), and non-food items
- Film and sheeting
- Strapping



#2 High Density Polyethylene (HDPE)



High Density Polyethylene (HDPE)

A hard plastic not as transparent PET that is often used for household cleaners, shampoo bottles, and yogurt containers.

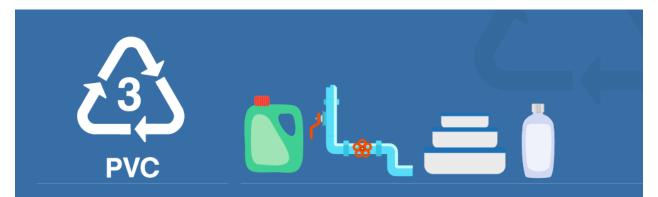
Recyclability

HDPE is accepted worldwide because it is one of the easiest plastic polymers to recycle. Most recycling companies will collect HDPE material and take these to large facilities to be processed. If there are other plastics in the batch the recycled end-product may be ruined.

- Bottles for non-food items (shampoo, soaps, cleaners, etc.)
- Plastic lumber
- Recycling bins
- Floor tiles
- Buckets, bins and crates
- Flower pots and garden edging
- Film and sheeting



#3 Polyvinyl Chloride (PVC)



Polyvinyl Chloride (PVC)

Frequently used for vinyl and pipes and not as stiff as PET and HDPE. It is the primary base plastic in a variety of piping, paneling, decking, fencing, and bottles. PVC products have an average lifetime of 30 years, with some reaching 50 or more years.

Recyclability

There is high chlorine content in raw PVC (around 56% of its weight), as well as high levels of hazardous additives added to achieve desired material quality. As a result, PVC requires separation from other plastics for recycling.

- Piping
- Decking , fencing, gutters & garden hoses
- Carpet backing, floor tiles, resilient flooring & mats
- Mud flaps
- Electrical boxes and cables
- Traffic cones
- Mobile home skirting
- Packaging, film and sheets







Low Density Polyethylene (LDPE)

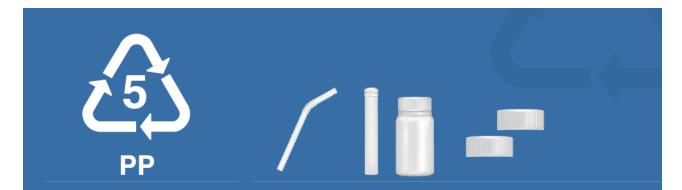
A soft flexible plastic that is often used as: bread bags, frozen food bags, and plastic shopping bags.

Recyclability

To be recycled the plastic film must be separated, which includes HPDE film from LDPE film. In addition, clear films should be separated from coloured or printed film. Film that is not separated can affect its value.

- Shipping envelopes
- Garbage can liners, compost bins
- Floor tiles and paneling
- Furniture
- Film and sheeting
- Landscape timber and outdoor lumber





Polypropylene (PP)

A plastic commonly found in caps, some yogurt containers, medicine bottles, and straws.

Recyclability

One of the least recycled post-consumer plastics at a rate less than 1%. The recycling process involves 5 steps: collection, sorting, cleaning, reprocessing by melting, and producing new products from recycled PP. The melting process involves two steps: melting PP at nearly 250°C to get rid of contaminant molecules; removing residual molecules under vacuum and solidification at 140°C. The products made following this process can be blended with virgin PP at a rate up to 50%.

- Automobile applications: battery cases, signal lights, battery cables
- Storage bins, shipping pallets, sheeting, trays
- Oil funnels
- Bicycle racks
- Brooms, brushes & ice scrapers,garden rakes



#6 Polystyrene (PS)



Polystyrene (PS)

commonly found as single-use coffee cups and take-out food containers, and trademarked as Styrofoam.

Recyclability

Challenging and expensive because it is low density and on average 98 per cent air. It must be shipped to a facility where it can be compressed to become cost- and time-effective to transfer it over long distances to be recycled and reused.

- Thermal insulation
- Thermometers
- Plastic mouldings (i.e., wood replacement products)
- License plate frames
- Camera or video cassette casings
- Protective packaging
- Light switch plates
- Desk trays
- Egg shell cartons



#7 Other Plastics







Other Plastics

This plastic can be found in water cooler bottles, large plastic containers, and mixed plastic materials.

Recyclability

Polycarbonates (PC) for example, are most difficult to recycle. One method of recycling polycarbonate is by chemical recycling. However, recycled PC may show lesser resilience and has reduced impact resistance when compared to newly manufactured PC. Plastics that also fall under 'Other' include multi-resin and mixed plastic items. These products are difficult to recycle conventionally.

- Bottles
- Plastic lumber application

