THE PLASTIC GUIDE

LEARN HOW TO IDENTIFY AND RECYCLE
YOUR PLASTICS



WHAT IS THE PLASTIC RESIN CODE?

In the late 1980s, the US Society of Plastics Industry (SPI) created a numbering system for plastics. The purpose was to create consistency in plastic manufacturing and help manufacturers and recyclers identify the different plastic types.

HOW DO THE PLASTIC CODES WORK?

Initially developed for industrial use, the plastic identification numbers have become a convenient way for consumers to identify the type of plastic an object is made of.

But the coding system isn't perfect, and there are some problems with it:

- The main problem is that the plastic identification symbol with the chasing arrow around a number has become synonymous with recycling. Many people assume that you can recycle any item displaying one of these symbols, but that's not the case for all the plastic numbers.
- It is voluntary for plastic manufacturers to use it, so you don't find it on every item.
- The codes do not distinguish between rigid and flexible plastics. Plastics are used to make rigid items, like a shampoo bottle, or items that are soft and flexible, like plastic packaging. Rigid items can usually go into your home-based recycling bin, while soft or flexible plastics need to be taken to a drop-off center.
- The resin codes only include six common plastics. The seventh group consists of all other types of plastic, including biodegradable, compostable, and mixed plastics. As a result, it's often reported that you can't recycle number 7 plastics. However, the real answer depends on the type of plastic.

Despite these issues with the resin codes, in many cases, it's still the best way to work out if an item is recyclable or not.

Read on to learn about each of the seven types of plastic.



PET - POLYETHYLENE TEREPHTHALATE

WHY DO WE USE IT?

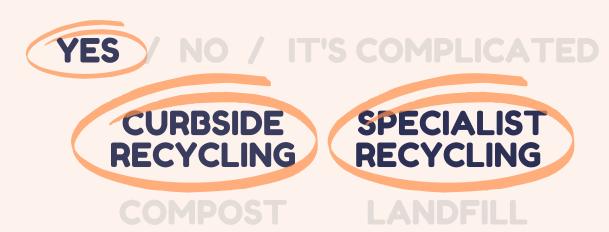
It's lightweight, safe, and does not react with foods and beverages stored inside. It can be reused and is easy to recycle.

COMMON ITEMS MADE WITH IT?

- Beverage bottles
- Food jars like peanut butter
- Salad bottles
- Cooking oil containers
- Shampoo & conditioner bottles
- Medical supplies
- Rope, carpet
- T-shirts, leggings, and other clothes
- Luggage and backpacks
- Pillow and sleeping bag filling
- Plastic Water Bottles



CAN YOU RECYCLE IT?



- 1. Look for the plastic number 1 symbol, often on the bottom.
- 2. Clean excess food or drain out any liquid.
- 3. Place in your curbside recycling bin or take to a container deposit depot.

CAN go in your curbside bin:

- Most plastic bottles that store food or liquid around the home, e.g. soft-drink bottles, water bottles, salad dressing, food trays.
- Cleaning or personal care products bottles and jars.

CANNOT go in your curbside bin:

- Flexible plastics like plastic bags and packaging, ziplock bags,
- Textiles like clothing, carpet, or other fabric items.
- Automotive parts or other unusual & large items.

Always check with your local authority as what is accepted differs for every location.



HDPE- HIGH-DENSITY POLYETHYLENE

WHY DO WE USE IT?

High-density polyethylene is stiff, durable, strong, safe, and does not react with foods and beverages. It's also easy to reuse and recycle.

COMMON ITEMS MADE WITH IT?

- Milk, water, and juice bottles
- Household cleaners and detergents.
- Freezer bags
- Agricultural pipe
- Kids toys
- Plastic wood composites
- Wire and cable covers
- Outdoor furniture
- Shampoo, soap, and personnel care
- Hard hats
- Fuel tanks and motor oil containers



CAN YOU RECYCLE IT?



- 1. Look for the plastic number 2 symbol, often on the bottom.
- 2. Clean excess food or drain out any liquid.
- 3. Place in your curbside recycling bin or take to a container deposit depot.

CAN go in your curbside bin:

- Most plastic bottles storing food or liquid around the home, e.g. milk & juice bottles, food containers.
- Cleaning or personal care products bottles and jars.

CANNOT go in your curbside bin:

- Flexible plastics like plastic bags, cereal box liners, etc.
- Any motor vehicle parts or other unusual or large items.

Always check with your local authority as what is accepted differs for every location.



PVC - POLYVINYL CHLORIDE

WHY DO WE USE IT?

PVC is lightweight, strong, and can take high impacts. It's resistant to grease, oil, and chemicals. It's stable and will not easily react with chemicals, and is relatively impervious to sunlight and weather.

COMMON ITEMS MADE WITH IT?

- Gutters
- Window frames
- Plumbing and Sewage pipes
- Fencing, decking, railing
- Tiles
- Bottles such as Shampoo bottles
- Shoes
- Appliances
- Credit cards, bank cards and store cards
- Shower curtains
- Raincoats
- Inflatable pool toys



CAN YOU RECYCLE IT?

YES / NO / IT'S COMPLICATED

CURBSIDE SPECIALIST

RECYCLING RECYCLING

COMPOST LANDFILL

Strictly speaking, PVC can be recycled; however, it depends a lot on the type of PVC and whether you have access to recycling programs. Most recycling programs are designed for commercial businesses.

In some countries, there are takeback programs for vinyl flooring. Try the links below to find a specialist recycler in your location.

- United States
- UK & Ireland
- Australia

PVC CANNOT go in your curbside bin.



LDPE-LOW-DENSITY POLYETHYLENE

WHY DO WE USE IT?

LDPE is durable and flexible, doesn't release harmful chemicals so it's safe for food storage. It also doesn't break easily. Plus, it's easy to recycle and recycle.

COMMON ITEMS MADE WITH IT?

- Squeezable bottles for condiments, like honey and mustard
- Kids toys
- General packaging
- Container lids for bottled drinks.
- Cling wrap and sandwich bags
- Grocery bags and frozen food bags
- Flexible container lids
- Dry cleaning bags
- Newspapers wrapping
- Shrink-wrap and stretch film
- Insulation on electrical wires and cables



CAN YOU RECYCLE IT?



- 1. Look for the plastic number 4 symbol, often on the bottom.
- 2. Clean excess food or drain out any liquid.
- 3. Place in your curbside recycling bin or take to a container deposit depot.

CAN go in your curbside bin:

- Most plastic bottles storing food or liquid around the home
- Cleaning or personal care products bottles and jars.

CANNOT go in your curbside bin:

- Flexible plastics like plastic bags, garbage bags, shrink wrap,
- Plastic bottle lids
- Unusual or large items.

Always check with your local authority as what is accepted differs for every location.



PP - POLYPROPYLENE

WHY DO WE USE IT?

PP has good chemical resistance to acids, alkalis, and most solvents. It is also resistant to moisture. It has a high melting point so it can be heated. It is also lightweight and strong.

COMMON ITEMS MADE WITH IT?

- Yogurt containers
- Margarine containers
- Syrup bottles
- Bottle Caps
- Straws
- Tupperware and other plastic food containers
- Take away food containers, cups, and plates
- Items used in the automotive industry,
- Sunglasses
- Plastic film
- Cereal box liners
- Food packaging, e.g. Chip packets, biscuit packets, and chocolate bar wrappers.



CAN YOU RECYCLE IT?



- 1. Look for the plastic number 5 symbol, often on the bottom.
- 2. Clean excess food or drain out any liquid.
- 3. Place in your curbside recycling bin or take to a container deposit depot.

CAN go in your curbside bin:

- Most plastic bottles storing food or liquid around the home
- Cleaning or personal care products bottles and jars.

CANNOT go in your curbside bin:

- Flexible plastics like plastic bags, garbage bags, shrink wrap, plastic bottle lids
- Unusual or large items.

Always check with your local authority as what is accepted differs for every location.



PS - POLYSTYRENE

WHY DO WE USE IT?

Polystyrene, also known as Styrofoam, has a low melting point, good moisture barrier, and low conductivity. It is also a very good insulator. These properties make it very useful in protecting goods during transit.

COMMON ITEMS MADE WITH IT?

- Disposable coffee cups
- Take out containers like clamshells
- Plastic plates, bowls, cutlery
- Meat and poultry trays
- Beer coolers
- Seafood containers
- Packing foam and peanuts
- Home and building insulation
- Rigid PS is used in medical bottles and devices, smoke detectors, compact disc cases, toys, and coat hangers.



CAN YOU RECYCLE IT?



Polystyrene, or plastic no 6, can be recycled. However, it **CANNOT** be recycled in your curbside recycling bin, it needs to be taken to a specialist recycler.

Below are some links to help you find drop-off locations in your country:

- United States EPS Recycling find a location or you could try Pakmail **Store Locator**
- United Kingdom Recycling in the UK
- Australia <u>Expanded polystyrene Australia</u>
- New Zealand <u>Junkrun NZ list some companies</u>.

POLYSTYRENE OR STYROFOAM CANNOT go in your curbside bin.



ALL OTHER PLASTICS

DEFINING PLASTIC NUBMER 7?

Plastic Number 7 includes all other plastics. Some common plastics you might recognize from this group are nylon, polycarbonate, or melamine, or Acrylonitrile Butadiene Styrene. There are many more not listed here.

COMMON ITEMS MADE WITH IT?

Polycarbonate

- Glasses or Eyewear
- Bulletproof glass
- Medical devices like dialysis machines
- Car parts
- CDs or DVDs
- housing for power tools

Polylactic Acid (PLA)

- takeaway storage containers, cups, and utensils
- medical applications like implants

Acrylonitrile Butadiene Styrene (ABS)

- Lego bricks and other toys
- Computer keyboards
- Power tool housings
- housing for home electrical appliances like shavers, vacuum cleaners
- Golf club heads

All 3 of these are popular in 3D printing

CAN YOU RECYCLE IT?



COMPOST LANDFILL

Most of the plastics in this group cannot be recycled in your curbside recycling bin. In some locations, you can put rigid plastic bottles and containers regardless of what plastic it is made from into your curbside recycling bin. However, it's best to always check with your local authority.

Some types of plastics under this group have specialist recyclers, so if you are willing to do a little homework and search them out you might be lucky.

POLYSTYRENE OR STYROFOAM CANNOT go in your curbside bin.



WHAT ABOUT YOUR SOFT PLASTICS?

Soft plastics refer to plastics that are flexible and soft. It includes plastic bags but also includes soft plastic packaging or film covering the food items that we buy.

Some examples include bread bags, cereal box liners, chocolate wrappers, or biscuit packets. Soft plastics also include wrapping from other items like toilet paper and tissues, bubble wrap, and even Ziploc bags.

How do you know if it's soft plastic? The best way to figure this out is the scrunch test. If you can scrunch the item into a ball and it doesn't bounce back easily, it can be recycled with soft plastics.

Soft plastic packaging is commonly made from the following types of plastic:

- Low-density polyethylene (LDPE)
- High-density polyethylene (HDPE)
- Polypropylene (PP)

For the majority of locations

SOFT PLASTICS DO NOT BELONG IN YOUR CURBSIDE RECYCLING BIN

Here are some links to find the location of your local soft plastic recycling drop-off points :

- United States <u>Plasticfilmrecycling.org</u> or <u>Terracycle</u>
- United Kingdom Recyclenow
- Australia RedCycle
- New Zealand <u>Recycling soft plastics store-locator</u>

How to recycle your soft plastics:

- 1. Collect your plastic bags and soft plastics.
- 2. Scrunch them up and place them in a bag.
- 3. Make sure that all food scraps are removed and the plastic is dry.
- 4. Remove any receipts if possible.
- 5. Take the soft plastics to your local drop off-center.

WAYS TO REDUCE YOUR IMPACT

There are many things that you can do to reduce the amount of plastic that you use. Here are some ideas:

- Use soap and shampoo bars instead of bottles.
- Carry a reusable water bottle with you.
- Make your own sauces, salad dressings, or other foods and reuse containers you already have. This not only reduces your plastic use but is healthier too.
- If you need to buy plastic bottles, make sure you look for those made using recycled content.
- Donate good-quality clothing you no longer want to your local charity for reuse.
- Avoid straws altogether or take your own with you.
- Avoid using single-use cups or plates. Why not try ecotableware made from wood or palm leaves?
- Try using cloth diapers instead of disposable ones.
- Reduce your usage of plastic containers in general by making your own cleaning products and using reusable containers.
- Look for products packaged in PET, HDPE, or LDPE as they are better options and can be recycled.
- Take your reusable grocery bags to the supermarket.
- Composting and cutting down your food waste will help you use fewer bin liners and reduce food waste.

And be sure to BUY RECYCLED PRODUCTS. That way, you are helping to create a market for your recycling.

Check out our **RECYCLED BRAND DIRECTORY** to find all the fantastic products made from your recycling.

We hope this guide has helped you better understand the different types of plastics and which ones can be recycled.

If you would like to learn more about recycling, then check out our other guides on how to recycle at www.everydayrecycle.com