

EcFacts: Plastic

The U.S. plastics industry has the capacity to process more plastic containers than we currently recycle. Producing new plastic from recycled material uses only two-thirds the energy required to manufacture it from raw materials.

What do the numbers mean?

The plastic industry has devised a numbering system to categorize plastic into seven general types. The number on the bottom of the container indicates the type of plastic from which the container is made. Different types of plastic are made using different dyes, plasticizers, UV inhibitors, softeners and other chemicals. As a result, each plastic container must be separated by type before it can be used again to make a new product.

Of the seven types of plastic, only two kinds, polyethylene terephthalate (PET), known as No. 1, and high-density polyethylene (HDPE), or No. 2,

	Code	Plastic name	Common use
easiest to recycle		Polyethylene terephthalate (PET)	Soft drinks, medicine bottles
		High-density polyethylene (HDPE)	Milk, water, shampoo and motor oil bottles
harder to recycle*		Polyvinyl chloride (PVC)	Meat wrap
		Low-density polyethylene (LDPE)	Film (plastic bags and wrap) grocery bags
hardest to recycle*		Polypropylene (PP)	Syrup bottles, yogurt tubs, reusable bottles
		Polystyrene and expanded polystyrene (PS)	Coffee cups, take-out containers, reusable consumer products
		Polycarbonate	Medical storage containers, electronics, Nalgene® water bottles

* Call Metro Recycling Information at (503) 234-3000 for recycling options.

Most plastic recycling operations involve the following steps:

Unpacking and sorting plastic by resin type and/or color

Shredding the sorted plastic into flakes

Cleaning plastic to remove contaminants, labels, foil and glue

Heating and extruding the melted plastic, which is then chopped into pellets

Selling pellets to manufacturers who mold and form them into finished products



are usually collected and reprocessed. And of these two plastic types, only narrow-neck bottles are typically purchased by remanufacturers because "bottle-grade" plastic is more easily melted and made into pellets and thus has more uses.

What kinds of products are made from plastic bottles?

Fifty-six percent of the clear plastic bottles, such as soft drink and water bottles recycled in the U.S., are made into polyester fiber for use in T-shirts, sleeping bag fill and carpet. The other portion of these bottles are made into new containers (24 percent) and strapping (16 percent).

Forty-five percent of recycled milk jugs and other opaque bottles are used to make new bottles. The plastic pipe industry consumes 14 percent of this material.

Did you know?

Plastic tubs such as yogurt or cottage cheese containers are not collected curbside due to the lack of strong markets in the region. However, these items may be collected and recycled at some area grocery stores.

Where is plastic recycled?



What products are made from recycled plastic?

- Nursery pots
- Plastic lumber
- Polyester fiber
- Plastic containers and bottles
- Industrial strapping
- Car parts, toys, fleece clothing and carpets



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For more information

For additional resources, information or free assistance, please visit www.RecycleAtWork.com or call Metro Recycling Information at (503) 234-3000.

These fact sheets were created by Metro and your local governments to help reduce waste in the business sector. *Printed on recycled paper. 05307jg*