

THE PLATINUM PACKAGING GROUP

ECO LINE

PLASTIC RECYCLING CHART

Many plastic containers manufactured today are stamped with symbols as an aid to recycling. These stamps identify the type of resin or resin mix in the plastic container. Only two types, PET and HDPE, are commonly collected for recycling.

	<p><i>Polyethylene Terephthalate. Includes beverage bottles (like 2-liter pop bottles), frozen food boil-in-the-bag pouches and microwave food trays. PET makes up about 7% of the plastics stream.</i></p>
	<p><i>High Density Polyethylene. Includes milk jugs, trash bags, detergent bottles, bleach bottles and aspirin bottles. HDPE makes up about 31% of plastics stream.</i></p>
	<p><i>Polyvinyl Chlorine. Includes cooking oil bottles and packaging around meat. PVC makes up about 5% of plastics stream.</i></p>
	<p><i>Low Density Polyethylene. Includes grocery store produce bags, bread bags, food wrap and mustard squeeze bottles. LDPE makes up about 33% of plastics stream.</i></p>
	<p><i>Polypropylene. Includes yogurt containers, shampoo bottles, straws, syrup bottles and margarine tubs. PP makes up about 9% of plastics stream.</i></p>
	<p><i>Polystyrene. Plastic foam (better known by trade name Styrofoam™). Includes hot beverage cups, fast food clamshell containers, egg cartons and meat trays. PS makes up about 11% of plastics stream.</i></p>
	<p><i>All other plastic resins or mixes of those above in same product. These plastics make up about 4% of plastics stream.</i></p>

Advantages of PET

- *PET can be recycled an indefinite number of times.*
- *Trays made from recycled bottles create demand for recycled PET; only 27% of PET bottles are currently recycled in the USA. These trays will help raise awareness and will increase recycling rates.*
- *Using recycled PET saves energy; Recycling 1 pound of PET saves approximately 12,000 BTU's.*

The Platinum Packaging Group are committed to helping schools "Close the Loop". Please see the attached document "Starting a PET Recycling Program" for more information on creating and maintaining a recycling program at your facility. For more information about PET recycling, please visit www.napcor.com

Plastic Containers (water, milk, soap, juice, etc.)



Most plastic containers you purchase will be marked with a large and clear recycling code.

Look for the code to be molded into the bottom of the container. Ideally, the entire container will be made of the same plastic to avoid confusion. Most container caps are NOT made of the same type of plastic and should be removed before the container is recycled.

Plastic Grocery Sacks, Produce Bags, and Other Packaging

Plastic grocery and produce bags are commonly made from plastic Types 2 or 4 and often collected at supermarkets. But be aware that most manufacturers have not yet added the recycling codes to the bags. The plastic bag recycling bins at supermarkets should also be marked with the types and colors of plastic accepted. Commonly, Types 2 and 4 can be mixed, but not always.

If your supermarket's bags or bins are not marked, please ask the store manager to do so. Plastic bags for other products such as bread, pasta, marshmallows, etc. are often of Types 2 or 4, but you can't know unless they are marked. If the bags are not recyclable, they should be marked with Type 7.

Other Plastic Items

All products made of a single plastic type should be marked since they will probably be discarded one day. This includes toys, plastic hangers, trash cans, shelves and many other products.

Products such as compact discs, videotapes, and computer discs are made from mixed materials which cannot be recycled unless first disassembled.



Without plastics, 400 percent more material by weight and 200 percent more material by volume would be needed to make packaging, while the volume of packaging would more than double.



By using plastic in packaging, American product manufacturers save enough energy each year to power a city of one million homes for three-and-a half years.

Recycling of PET Bottles

From Wikipedia, the free encyclopedia

Recycling of PET Bottles is the activity whereby bottles made out of PET are collected, sorted and processed in order to reuse the material out of which they are made.

In many countries, PET plastics are coded with the number 1 which is found inside the universal recycling symbol, usually located on the bottom of the container.

PET is used as a raw material for making packaging materials such as bottles and containers for packaging a wide range of food products and other consumer goods. Examples include soft drinks, alcoholic beverages, detergents, cosmetics, pharmaceutical products and edible oils. PET is one of the most common consumer plastics used.

The empty PET packaging is discarded by the consumer after use and becomes PET waste. In the recycling industry, this is referred to as "post-consumer PET." Many local governments and waste collection agencies have started to collect post-consumer PET separately from other household waste. The collected post-consumer PET is taken to recycling centers known as materials recovery facilities (MRF) where it is sorted and separated from other materials such as metal, objects made out of other rigid plastics such as PVC, HDPE, polypropylene, flexible plastics such as those used for bags (generally low density polyethylene), drink cartons, and anything else which is not made out of PET.



Bales of crushed PET bottles

Post-consumer PET is often sorted into different color fractions: transparent or uncolored PET, blue and green colored PET, and the remainder into a mixed colors fraction. The emergence of new colors (such as amber for plastic beer bottles) further complicates the sorting process for the recycling industry.

This sorted post-consumer PET waste is crushed, pressed into bales and offered for sale to recycling companies. Transparent post-consumer PET attracts higher sales prices compared to the blue and green fractions. The mixed color fraction is the least valuable. Recycling companies will further treat the post-consumer PET by shredding the material into small fragments. These fragments still contain residues of the original content, shredded paper labels and plastic caps. These are removed by different processes, resulting in pure PET fragments, or "PET flakes". PET flakes are used as the raw material for a range of products that would otherwise be made of polyester. Examples include polyester fibres, a base material for the production of clothing, pillows, carpets, etc., polyester sheet, strapping, or back into PET bottles.

Worldwide, approximately 1.5 million tons of PET are collected per year. Petcore, the European trade association that fosters the collection and recycling of PET, forecasts that in Europe alone, collection will exceed one million tons by 2010.

For more information:

www.napcor.com – National Association for PET Container Resources

www.americanchemistry.com/plastics -- American Chemistry Council

Starting a PET Recycling Program

More consumers are requesting products packaged in PET plastic because PET containers are lightweight, shatter-proof and resealable. More PET plastic bottles on the shelf or in vending machines means more bottles to recycle. Recycled PET plastic bottles are not only kept from landfills, but are made into exciting, everyday products.

This overview serves as a general guide to setting up PET recycling programs outside of the conventional curbside or drop-off recycling programs. For more details, please contact NAPCOR.

Essential Elements of a Successful Program

A successful PET recycling program starts with five essential elements:

- *A capable and enthusiastic program coordinator*
- *A secure market for the PET recyclables*
- *A simple and reliable collection system*
- *An effective employee education and public awareness program*
- *A qualified, reliable, full-service outside reclamation company (a recycler or waste hauler)*

Starting a PET Recycling Program

The following important steps will help to ensure an efficient and effective PET collection program:

1. **Appoint a program coordinator.**
Appoint an individual to implement and oversee the program. The program coordinator should also recruit assistance as needed.
2. **Conduct a PET plastic bottles assessment.**
This assessment should include information on how many PET bottles are sold on the premises, what other materials are currently recycled by your organization, and where most of the PET bottles are consumed and thrown away.
3. **Determine who will collect and market the recyclables.**
Numerous factors may affect your choice, including your ability to deliver the recyclables to market yourself and any opportunities for cooperative programs with neighboring businesses. You should also consider negotiating with a local recycling company or waste hauler to pick-up, purchase and market your recyclables.
4. **Establish the on-site collection system.**
Most on-site collection systems include individual collection bins and transportation to a central storage location on your premises. You should consider the number, size and location of these bins as well as any additional servicing necessary, which might include emptying the bins, using bin liners, sorting trash from the bin, and preparing the bottles for marketing. You should also determine who will collect and transport the bottles and where they will be stored to accumulate before being sent to market.
5. **Educate and train the staff.**
Your recycling team must have a good understanding of the program's importance and operational methods as well as each individual task related to the process. Your staff also should be able to educate consumers on appropriate recycling methods.
6. **Publicize the program through consumer and employee education.**
Teach those on your premises how to recycle PET plastic bottles properly so that they can spread the word. Remind them to recycle their bottles and share the success of their recycling efforts. Planning events such as a PET plastic fashion show can help to highlight the importance of recycling.
7. **Monitor and evaluate the program.**
Stay in close contact with your collection staff and recyclables buyers. Respond quickly to the "bugs" in your system. Evaluate the collection system often to ensure its effectiveness.

PET Recycling Program Checklist:

Before you initiate your plans for a PET recycling program, make sure you have:

- ✓ *A capable program coordinator.*
- ✓ *A secure market for recyclables.*
- ✓ *A reliable collection system.*
- ✓ *A detailed assessment of PET plastic usage/disposal.*
- ✓ *A well-planned system for employee education.*
- ✓ *A plan for publicity and consumer education.*
- ✓ *A qualified full-service reclamation company.*
- ✓ *A clear process for monitoring and evaluation*

THE PLATINUM PACKAGING GROUP

tel: (562) 630-6700 • fax: (562) 630-6716
7627 Somerset Blvd., Paramount, CA 90723

TO PLACE ORDERS:
sales@platinumpkggroup.com

FOR MORE INFORMATION:
www.platinumpkggroup.com

QUESTIONS:
information@platinumpkggroup.com