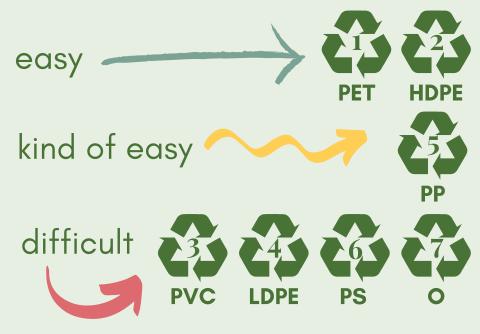
# **Plastic Recycling Breakdown**

# What do those little numbers mean?

Recycling your household plastics is sometimes not as easy as it seems. Even if a plastic item is stamped with a recycling symbol, it does not always mean your curbside services can accept those items. This quick guide will explain what those pesky little numbers mean and help you make those recycling decisions to avoid contamination and ensure the quality of our recycled materials.

How easy are these materials to recycle?



For more information visit <u>calrecycle.ca.gov</u>

# PET

# **Polyethylene Terephthalate**

#### What is it?





Polyethylene Terephthalate is a common, general-purpose plastic polymer that is often used because it is lightweight and easy to recycle, on top of being very inexpensive. PET is in high demand because it can be recycled into new products, but only about 20% of PET products are recycled every year.

#### What everyday items is this material found in?

- soda bottles
- mouth wash bottles
- liquid soap containers

- water bottles
- condiment bottles
- plastic food jars



#### How do I recycle those items?

Items made of PET and marked with the **#1 Recycling Symbol** can be recycled with most curbside recycling services. Any bottles marked with "CRV" are also a part of the California Refund Value buy-back program and can be cashed in at recycling centers. It is important that bottles and containers are empty and rinsed of any food residue.

#### What items is it recycled into?

PET can be recycled into more bottles and food containers, furniture, carpet, and even tote bags.

# HDPE

# **High Density Polyethylene**

#### What is it?



High Density Polyethylene is a common plastic polymer that is used often because it is versatile and resistant, making it ideal for food and beverage storage. HDPE is one of the most durable everyday plastics and is easily recycled into useful products that benefit from its strong and corrosion-resistant properties.

#### What everyday items is this material found in?

- juice bottles
- milk jugs detergent dispensers
- shampoo bottles



#### How do I recycle those items?

Items made of HDPE and marked with the **#2 Recycling Symbol** can be recycled with most curbside recycling services. It is important that bottles and containers are empty and any food residue, oils, or detergents are wiped out and disposed of properly.

#### What items is it recycled into?

HDPE can be recycled into more detergent and shampoo bottles, pipes, tables, and even pens.



# **Polyvinyl Chloride**

#### What is it?





Polyvinyl Chloride is also a commonly used plastic material because it is very inexpensive to make and is ideal for products like pipes because it is durable and weathers well. The Chlorine in HDPE makes it waterproof but can also cause the release of toxic chemicals during manufacturing and makes it difficult to recycle.

#### What everyday items is this material found in?

- cooking oil bottles • pipes
- window trim

- children's toys
- house siding
  - insulated wire coating



#### How do I recycle those items?

Items made of PVC and marked with the #3 Recycling Symbol cannot be recycled with most curbside recycling services; you can check with your local provider. If you cannot recycle your #3 items, PVC's durability should allow you to reuse or upcycle the materials in many beneficial ways!\*

#### What items is it recycled into?

PVC can be recycled into mats, decks, paneling, flooring, and even speed bumps.

\*When burned or melted, PVC will release dioxins, very harmful, toxic chemicals. Never attempt to burn PVC.

# LDPE

# Low Density Polyethylene

# Low Density Polyethylene is also a commonly used plastic material because it is very flexible, lightweight, and translucent. This makes it very popular for food packaging. However, its lightweight properties also make it very difficult to recycle as it can actually clog recycling machinery, causing equipment damage and wasting time and money.

#### What everyday items is this material found in?

- six-pack rings squeezable bottles furniture
- grocery bags\* frozen food bags bread loaf bags

#### How do I recycle those items?

What is it?

Items made of LDPE and marked with the **#4 Recycling Symbol** cannot be recycled with most curbside recycling services; you can check with your local provider. If you cannot recycle your #3 items locally, consider looking into the services provided by nonprofits like TerraCycle who will accept many of these items.

#### What items is it recycled into?

LDPE can be recycled into compost bins, trash can liners, shipping envelopes, and floor tiles.

\*Grocery or shopping bags can often be recycled at your local supermarket, but it is also better to bring a reusable bag with you if are able to!



difficult to recycle



## Polypropylene

What is it?



Polypropylene is one of the most widely used plastic polymers because of its very high melting point. This makes it a versatile plastic used for food containers, storing hot liquids, carpets, automobile parts, and packaging for medical equipment.

#### What everyday items is this material found in?

- yogurt cups
- syrup bottles
  - straws

- bottle caps
- medicine bottles
- car bumpers

#### How do I recycle those items?

While items made of PP and marked with the **#5 Recycling Symbol** are recyclable, some curbside recycling services will not accept certain products. It is essential that bottles and containers are empty and food residue and other oils are wiped out so that the recyclable containers do not end up in landfills.

#### What items is it recycled into?

PP can be recycled into bicycle racks, rakes, ice scrapers, food containers, clothing items, and much more!





## **Polystyrene**

#### What is it?





Polystyrene is a commonly used plastic material because its ability to be made into either solid or foam products makes it very versatile. It is also an excellent insulator, making it popular in food packaging and in the shipping industry. However, PS is considered a non-biodegradable pollutant, meaning it would last hundreds of years in a landfill while releasing carcinogens.

#### What everyday items is this material found in?

- egg cartons
- take-out containers
  shipping insulation
- disposable plates red solo cups
- coat hangers

#### How do I recycle those items?



Items made of PS and marked with the **#6 Recycling Symbol** cannot be recycled with most curbside recycling services as it is difficult to separate and often contaminates other recyclable materials. Consider looking into the services provided by nonprofits like EPS Industry Alliance, which promotes local drop-off locations for PS.

#### What items is it recycled into?

LDPE can be recycled into insulation, egg cartons, take-out containers, rulers, and light switch plates.



# **Other or Miscellaneous**

#### What is it?

### $\times$ difficult to recycle

recycle to

protect



Recycling Symbol #7 is labeled O for "other" because it is the code reserved for all other plastic resins and polymers that do not fit into the previous categories. Polylactic acid (a plant-based plastic) and polycarbonate both fall into this category, among others. Polycarbonate is considered a hormone disruptor, making it toxic to humans along with being difficult to recycle.

#### What everyday items is this material found in?

- nylon & acryllic
- food containers
- sunglasses
- fiberglass

- bulletproof materials
- signs

#### How do I recycle those items?

Items marked with the **#7 Recycling Symbol** cannot be recycled with curbside recycling services, and there is no standardized way to recycle these plastics. Some plant-based plastics are compostable, but many fall short of actually being recycled into new and usable materials with current recycling techniques and machinery.

#### What items is it recycled into?

O items can sometimes be recycled into plastic lumber, depending on their original make-up.

# Why Recycle?

Recycling is essential to a **sustainable future**. Recycling plastics correctly is a responsible way to reduce waste, conserve resources, and protect our planet from plastic pollution. While it may seem counterintuitive that plastics stamped with a recycling symbol are not always recyclable. However, by taking the time to sort your recycling, you are doing your part to ensure our planet's future! Our watersheds are at risk of pollution from urban runoff, specifically from macro and microplastics that wash into storm drains and eventually into creeks and the San Francisco Bay.

It is estimated that every year approximately seven trillion microplastics discharge via stormwater into the SF Bay. However, by taking these simple steps, we can all do more to **reduce** our plastic consumption and increase the number of plastics that are given a **second life**!



# Why Recycle?

Before any form of plastic recycling, dispose of the remaining product, oil, or residue in a trash bin and rinse the plastic thoroughly. Removing these residues will reduce plastic recycling contamination. This will help **protect our planet** by ensuring that those plastics are diverted from landfills and recycled into usable materials.







An additional step you can take is to check websites like the nonprofit <u>TerraCycle</u>, which strives to provide **recycling solutions** for items that are generally not recyclable. Their website offers a comprehensive list of dropoff locations or shipping options for product packaging.

## **Additional Resources**

For more information about how plastics are recycled in California, visit <u>www.calrecycle.ca.gov</u>. You can also check your local curbside waste service's website to double-check which plastic materials are recycled in your neighborhood.



The **Watershed Watchers** program is a partnership of the **Santa Clara Valley Urban Runoff Pollution Prevention Program** (SCVURPP) and the **San Francisco Bay Wildlife Society**. To learn more about how you can protect your local watershed, visit our website at <u>www.sfbayws.org</u>, or you can find additional resources from SCVURPPP at <u>www.mywatershedwatch.org</u>.





