

Plastics By Number

The numbers tucked inside the recycle symbol on the bottom of plastic products tell you way more than just what recycling bin to toss it in. Those numbers reveal a lot about the characteristics of the plastic, how easy it is to recycle, and chemicals it contains.

#	Type of Plastic	Common Products	Characteristics	Concerns	Commonly Recycled?
1	Polyethylene Terephthalate (PET/PETE)	beverage bottles, clothing, carpets mouthwash bottles; peanut butter, salad dressing & other food containers	clear, tough, heat resistant, moisture/gas barrier	May allow bacteria to accumulate; a common type of land-based marine debris	Yes
2	High Density Polyethylene (HDPE)	milk jugs, household cleaner containers, juice bottles, shampoo bottles, cereal box liners, motor oil bottles, yogurt & butter tubs	moisture barrier, chemical resistant	Generally considered safe for human use; a common type of land-based marine debris	Yes
3	Vinyl or Polyvinyl Chloride (V/PVC)	food wrap, shampoo bottles, Clear food packaging, cooking oil bottles, medical equipment, piping, windows	transparent, chemical resistant, long term stability, good weatherability, stable electrical properties	May contain dangerous chemicals, including phthalates and DEHA; as marine debris, these chemicals can leach into the environment	No
4	Low Density Polyethylene (LDPE)	squeezable bottles, shopping bags, clothing, carpet, frozen food, bread bags, food wraps	tough, flexible, transparent, low melting point, stable electrical properties	Generally considered safe for human use; bags pose a special threat as marine debris as they can cause entanglement problems and are often ingested	Increasing
5	Polypropylene (PP)	yogurt containers, ketchup bottles, syrup bottles, medicine bottles, automobile battery casings	chemical resistant, a high melting point, making it ideal for hot fill liquids, excellent resistance to water and to salt and acid solutions	Generally considered safe for human use; a common type of land-based marine debris	Increasing
6	Polystyrene (PS)	take-out containers, CD cases, egg cartons, meat trays, and disposable plates and cups. medical packaging, laboratory ware	General purpose polystyrene: clear, hard and brittle Expandable Polystyrene (EPS): stiff, lightweight, thermal insulation.	May leach harmful chemicals, especially when heated; a common type of land-based and disaster-related debris; looks like fish eggs and plankton as it breaks into smaller pieces, posing a threat to animals that might ingest it	No
7	Other (includes ABS copolymers, polymethyl methacrylate, polyurethane, nylon, polycarbonate)	sunglasses, iPod cases, computer cases, nylon, 3- and 5-gallon water bottles, bullet-proof materials, foam insulation	varies	Varies – some types are generally considered safe while others may contain harmful chemicals; as marine debris, type 7 ropes, nets, and fishing line pose special risks for entanglement	No

Sources: American Chemistry Council (<http://plastics.americanchemistry.com/Life-Cycle#majorplastics>)

Nation of Change (<http://www.nationofchange.org/numbers-plastic-bottles-what-do-plastic-recycling-symbols-mean-1360168347>)