

Smart Plastics: Common Questions and Answers

Q: Are all plastic containers labeled #7 made of polycarbonate? For example, are baby food containers labeled #7 safe?

A: Not all #7 plastics are polycarbonate. Since #7 is a catch all category for plastics that don't fit into the #1-6 categories, it is used for polycarbonate, plastic mixtures (copolymers) and also the new bio-based plastic. For example:

- Gerber baby food containers are labeled #7 "other" but are not polycarbonate. According to Gerber, their plastic is an overlay of polypropylene (inside) and polystyrene (outside). Polypropylene is generally considered safer than polycarbonate, which can leach the hormone disrupting chemical, bisphenol A.
- BornFree baby bottles are made from a #7 clear plastic that looks like polycarbonate, but isn't. BornFree bottles and sippy cups are made of bisphenol A-free, polyamide.
- Polylactic acid or PLA plastic which is made from corn and compostable is also labeled #7. Efforts are underway to identify a new symbol for the bio-based plastics.
- SAN or Styrene-acrylonitrile resin is a copolymer plastic consisting of styrene and acrylonitrile. SAN is labeled #7.

Obviously this is very confusing to consumers who are trying to find safe plastics. If you see a #7 and it is not labeled as "PLA" or "compostable," you will need to call the manufacturer and ask them what type of plastic it is.

Q: Is it safe to keep using my polycarbonate containers?

A: Polycarbonate is known to leach bisphenol A when heated or when harsh detergents are used - so dishwashers with the combination of high heat and detergent use could increase leaching. If you use polycarbonate containers, follow these tips to be safe:

- Avoid microwaving or using for hot foods or beverages.
- Discard old or scratched plastic containers.
- Hand wash with a mild detergent.
- Avoid using for acidic foods like tomato sauce or fatty foods like gravy.

Q: Are zip lock bags safe?

A: Usually zip lock bags are made from polyethylene, so should be fine for use with cold foods. To be cautious, avoid storing fatty and acidic foods in them, as leaching is more likely to occur with those types of foods. Note: some plastic wraps are made of PVC- so be sure that the bags you purchase are not PVC.

Q: Why do some plastic food use products have a recycling symbol and others don't?

A: The recycling symbol is used mostly, but not exclusively, on disposable plastic packaging and single use containers. Non-disposable food use goods like dinnerware, pitchers, flatware, baby bottles, sippy cups and other products usually do not have a recycling label.

Q: Should I be concerned about using melamine plastic dishes, especially for children?

A: We contacted the manufacturer of melamine and they will not say what type of plastic it is made of. It's been around for decades and seems to be a very stable substance. We have not seen any studies on leaching. To be cautious, avoid using in the microwave.

Q: I avoid purchasing bottled water by using a refillable water bottle. What are the safest options?

A: Using a refillable water bottle is a good idea, as it reduces plastic waste, saves energy and non-renewable petrochemical resources and also saves you money. In addition, bottled water is not regulated like tap water, so its safety is uncertain. If you use a refillable water bottle, follow these tips just to be safe:

- Look for alternatives to polycarbonate e.g. stainless steel, bisphenol A-free polycarbonate bottles by Camelbak, non-polycarbonate bottles by Nalgene.
- If you use a polycarbonate water bottle, avoid use for hot liquids and don't use harsh detergents or place in the dishwasher. Discard worn or scratched bottles.

Q: What type of plastic is Tupperware made of?

A: Tupperware has many products, made of various types of plastic. Many are made of #5 polypropylene. If a particular product is not labeled, you can check with the company to find out the type of plastic used. The general guidelines for food use of plastics apply to Tupperware:

- Avoid using in the microwave.
- Use # 1, 2, 4 and 5 for storage.
- Just to be safe, avoid storing acidic foods like tomato sauce or fatty foods like gravy in plastic containers.
- Discard containers that are scratched or discolored.

Q: Are those five gallon water cooler jugs safe?

A: The five gallon water cooler jugs are usually made of polycarbonate plastic, which can leach bisphenol A, under certain circumstances. Polycarbonate plastic can leach bisphenol A when heated, when harsh detergents are used or when worn or scratched. We have not seen leaching studies for this product when used under normal conditions. You could check with the company and ask if they have conducted such studies. As an alternative to water jug delivery, consider installing a water filtration system for cooking and drinking water, especially if you are concerned about the quality of your drinking water. It's best to look for one that's NSF certified, so you know that it delivers on its claims.

Q: How do I choose a safe baby bottle?

A: Avoid clear, shiny plastic baby bottles, unless the manufacturer says they're not polycarbonate. This includes clear, plastic bottles made by Avent, Dr. Brown's, Evenflo (clear), First Years, Gerber, Munchkin, Nuby, Playskool, Playtex Vent Aire and Second Nature.

Instead choose bottles made of glass or opaque less-shiny or pastel colored plastic (polyethylene, polypropylene or polyamide).

Safer Baby Bottles:

- Adiri Natural Nurser (www.adiri.com , 1-888-768-4459)
- BornFree (www.newbornfree.com, 1-877-WWW-BORN)
- Evenflo's glass, colored or opaque plastic bottles (www.evenflo.com, 1-800-356-BABY)
- Gerber colored or opaque plastic bottles (www.gerber.com 1-800-4-GERBER)
- Green to Grow (www.greentogrow.com , 1-877-GRN2GRO)
- MAM/Sassy/Ultivent/Baby Food Nurser Kit (www.sassybaby.com,1-616-243-0767)
- Medela (www.Medela.com , 1-800-TELL-YOU)
- Mother's Milkmate (www.mothersmilkmate.com, 1-800-499-3506)
- Playtex Nurser, Playtex Drop-ins (www.playtexproductsinc.com/infant)
- Think Baby (www.thinkbabybottles.com, 1-877-446-1616)
- Wee Go Bottle (www.shopbabylife.com/weego-bottle.html)

For more details about plastic bottles and containers, read our "Smart Plastics Guide: Healthier Food Uses for Plastics," at: www.healthobservatory.org.



Institute for Agriculture and Trade Policy

April 2008