

Article Published on GreenGuideNetwork.com, May 17, 2010

The 7 Types of Plastic & What They Mean to Your Health.



Regardless of whether you're concerned about recycling or not it is safe to say that most of us are concerned about our health. It is also safe to assume that you have drunk from a plastic container at least once in your life. Do you know the difference between the number 3 and number 7 types of plastic?

Did you know that BPA, the highly toxic chemical found in plastic, is linked to obesity, cancer, and endocrine problems in fetuses and children?

Green Guide Network has created this guide to the 7 types of plastic and what they mean to your health, many recycling programs depend on these numbers to tell which plastics are recyclable and which are not - you can also use these numbers to determine which are safe to use and which are not.

Try this: Within reach, or somewhere at your home or office find a plastic container. You'll notice a number inside of a recycling symbol - typically on the bottom, side, or top - and ranging from 1 to 7. Many recycling programs depend on these numbers to tell you which plastics you can and can't recycle.

The numbers, reflecting seven different types of plastic available in the market, are found on the 200 million tons of plastic that is produced annually to make baby and water bottles, sports equipment, medical and dental devices, CD's, DVD's, and more. The number is a resin identification code associated with the type of plastic used in the container with some plastics rating healthier and more environmentally friendly and some considerably less so. Some are easier to recycle, some considerably less.

Here's the GGN guide to what the plastic numbers mean, whether they're safe, and how easily recyclable they are.

To summarize, plastics in categories #2, #4 and #5 are generally considered safe. Plastic #1 is safe but should not be re-used due to the risk of growing bacteria. Any of the other categories should be used with extreme caution, especially around food or drink, and the risk is even greater when heating food. For microwaving, know that microwave safe containers aren't necessarily healthy they just won't melt. Do yourself, your body, and the environment a favor - avoid plastic entirely and stick to glass when you can.



Plastic #1: Polyethylene terephthalate, also known as PETE or PET. Usually clear in color, the vast majority of disposable soda and water bottles are made of #1 plastic. This plastic is considered generally safe and is picked up by most curbside recycling programs. However, the porous nature of its surface allows bacteria and flavor to accumulate, so avoid reusing these bottles as makeshift containers.

Plastic #2: High-density polyethylene, or HDPE. Most milk jugs, detergent bottles, juice bottles, butter tubs, and toiletries bottles are made of HDPE. Usually opaque in color and picked up by most recycling programs. This plastic is considered safe and has low risk of leaching.

Plastic #3: Polyvinyl chloride, or PVC. It is used to make food wrap, bottles for cooking oil, and the highly common plumbing pipes. PVC, although tough in terms of strength, it is not considered safe to cook food near it. PVC contains softening chemicals called phthalates that interfere with hormonal development. Never cook using food wrap, especially in a microwave oven. This plastic is rarely accepted by recycling programs.

Plastic #4: Low-density polyethylene (LDPE) is used to make grocery bags, some food wraps, squeezable bottles, and bread bags. While considered safe it is unfortunately not often accepted by curbside recycling programs.

Plastic #5: This is polypropylene. Common items produced with it include yogurt cups, medicine bottles, ketchup, syrup bottles, straws and similar wide-necked containers, as well as water bottles with a cloudy finish. This plastic is also considered safe, and is increasingly being accepted by curbside recycling programs.

Plastic #6: Polystyrene, or Styrofoam, from which disposable containers and packaging are made. Also found in disposable plates and cups. Overwhelming evidence suggests that this type of plastic leaches potentially toxic chemicals, especially when heated. Try to avoid the use of #6 plastic as much as possible. It is difficult to recycle and most recycling programs won't accept it.

Plastic #7: This category basically means "everything else" and is composed of plastics that were invented after 1987 - the use of plastic in this category is at your own risk since you don't know what could be in it. Polycarbonate falls into this category, including the highly toxic BPA. Products produced include baby and water bottles, sports equipment, medical and dental devices, CD's, DVD's, and even iPods. It is wise to dispose of any food or drink related product that is known to contain BPA. It is difficult to recycle #7 plastic and most curbside recycling programs won't accept it.