Plastics. Maligned by Myths

(Bust the myths. Get your facts right.)



We live in the information age. All facts and figures are just a tap of a keyboard away. Or are they? Unfortunately, we also live in a 'misinformation' age where myths are dressed up and spread as facts.

Plastics have been reviled by non-experts who only know half of the story and this misleading information has been spread to such an extent that the material itself is now considered as an incarnation of evil, and its invention loathed as a nightmare.

Let's examine the realities for ourselves and separate the myth from the truth.





MYTH ONE

"All plastics are not recyclable."

For example,



Plastic #1 can be recycled into textiles (garments, furnishings, etc.), tote bags, carpet, polar fleece etc.

Let's take this myth head on.

TRUTH

No matter what kind of plastic, it can almost always be recycled.

It's just that certain types of plastics are more valuable than others in the recycling market. The plastics that fetch a lower sum have unfairly earned the reputation of being branded 'unrecyclable.' As technologies for sorting different plastics evolve, these plastics too will be recycled with all the others.



Plastic #2 can be used for making pens, collection bins, lumber, and benches.



MYTH TWO

"Plastics may cause cancer."



TRUTH

There is no evidence to support this falsehood. In fact, it is absolutely safe to eat from plastic containers.

It is also untrue that chemicals that can cause cancer are found in plastics. No such chemical exists in plastic containers.

MYTH THREE

"Non-Plastics are eco-friendly."

TRUTH



A well-established study reveals that

since paper is produced by felling trees, it leaves a greater carbon footprint.

Also, it takes only 1 truck to deliver plastic bottles and 7 trucks to deliver the same amount of glass bottles. So, do the math: Which one makes more commercial and environmental sense?

To extend the shelf life of its content, no other material comes even close to plastics.

In fact, right across the distribution chain, plastics have clearly proved to be the superior packaging option on almost every count.





X

Plastics

Glass

MYTH FOUR

"Producing plastics consumes a lot of natural resources."



TRUTH

Plastics are lighter and use lesser raw materials to produce. So, it is evident that plastic packaging is more energy and resource efficient when compared to heavier alternatives such as glass.

In fact, because of their lightweight, plastics consume less amount of fuel in the transportation of vehicles, passengers and the payload. Thus, fuel, which is also a valuable natural resource is saved.

"Plastics take 450 years to break up."



MYTH FIVE

> First of all, plastics started gaining mass popularity only about seventy years ago, so how can anyone conclusively say that it takes 450 years to break down?



The fact is that there is no scientific data to establish how many years it takes for plastics to break down proves that these are just sensational statements.

Also, plastics are designed to withstand the natural process of decomposition which is why they are the preferred material for pacakaging. МҮТН SIX

"Reusing plastic bottles causes harmful chemicals to leach into water."

TRUTH

Plastic water bottles are usually made from polyethylene terephthalate (PET), a lightweight, transparent, inert, shatter-resistant and well-tested material.

US-FDA, after extensive reviewing, allows the use of **PET in both single-use and** multiple-use packaging of foods, pharmaceuticals and cosmetics.

Refillable bottles made with the PET resin are frequently reused in a number of other countries.

MYTH SEVEN

"Recycling plastics does not save energy."



TRUTH

It is a fact that 66% of energy is saved while producing new plastic products from recycled materials.

This also reduces greenhouse gas emissions.



MYTH EIGHT **"Plastic containers** are unsafe in a microwave oven."



TRUTH

Plastic containers that are meant for use in a microwave oven are certified for that purpose and are clearly marked with the 'Microwave Safe' symbol.

All such containers must undergo stringent tests to earn this certification. However, it is to be noted that some plastic containers are not meant to be used in microwave ovens.

MYTH NINE

"There is no market for recycled plastics."





Design

The Infinite Loop of Plastics

TRUTH

As more companies become sensitive to sustainability and the environment, the market for recycled plastics is growing by the day.

Recycled plastics are found in automotive parts, carpets, piping and in many other products.



Waste Collection







MYTH TEN

"Resin codes dictate usage."

TRUTH

In 1988, the Plastics **Industry introduced** a numbering system for recyclers - this system was not for the end consumers.

The aim was to codify the chemistries of different polymers thereby enabling the identification of its properties.



Today the codes can help recyclers segregate plastics properly.

MYTH **ELEVEN**

"Bio-plastics will eliminate and solve all disposal issues."

TRUTH

Bioplastics are plastics derived from bio-organic material. While they have green benefits, they also have certain limitations when it comes to disposal.

There is no evidence that the bioplastics can biodegrade in the darkness and confinement of a landfill.

Bioplastics may emerge from more sustainable sources, but in the end, they have to be recycled into the system to be effective. Further, bioplastics more often than not are non-recyclable.

Biodegradability introduced by the incorporation of additives in the normal plastics are even more harmful. Such plastics not only hurt the recycling chain of the normal plastics but also result in the formation of microplastics.



"All plastic bottles end up either in the ocean or in landfill."





Actually, only 10% of **PET bottles annually** made in India end up in landfills.

65% are recycled in registered facilities, 15% by the unorganised sector and 10% is reused at home.



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