



ONE PLANET **ACADEMY**

ALL ABOUT PLASTICS

MODULE 1 | **Decoding Plastics** | Handout

Points to remember

● **Why do we use so much plastic?**

Plastic is an incredibly versatile material, endowed with properties that make it ideal for many products and purposes. For example, plastic is:

- Light-weight
- Sturdy
- Mouldable
- Insulating
- Waterproof
- Fire-resistant
- Non-corrosive
- Inexpensive

● **What is plastic made of?**

- Plastic products that we use every day are made of a complex mix of synthetic compounds, mostly derived from fossil fuels.
- Plastics are polymers, which means they are large molecules formed by linking smaller units (monomers) through a process called polymerisation.

● **Types of plastics**

There are two types of plastics:

1. Thermoset plastics



- Cannot be melted once they are set and shaped
 - Difficult to recycle
 - Common thermoset plastics:
 - Bakelite
 - Melamine
 - Silicone
 - 2. Thermoplastics
 - Can be melted and reshaped
 - Recyclable
 - Common thermoplastics:
 - PET (Polyethylene)
 - HDPE (High density polyethylene)
 - PVC (Polyvinyl chloride)
 - LDPE (Low density polyethylene)
 - PP (Polypropylene)
 - PS (Polystyrene)
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