**Know Your Plastics**

**PET or PETE**
Polyethylene Terephthalate
- **Moderate Hazard**
- PET plastic breaks down and after recycling it seeps into liquid and food

**HDPE**
High Density Polyethylene
- **Low Hazard**

**PVC**
Polyvinyl Chloride
- **Hazard**
- Endocrine Disruption

**LDPE**
Low Density Polyethylene
- **Low Hazard**

**PP**
Polypropylene
- **Low Hazard**

**PS**
Polystyrene
- **Hazard**
- Styrene can leach from polystyrene. This can lead to nervous system damage and cancer

**Other**
- **Hazard**
- Leaches BPA which Causes endocrine disruption and reproductive Toxicity

**Plastics And Sustainability?**
Can Plastics And Sustainability go hand in hand?

**What Is Plastic?**
A plastic is a synthetic or man-made polymer which is similar to resins found in trees and other plants in many ways.

**How are Plastics made?**

- **Crude Oil & natural gases**
- Chemical 'plasticizers’ are added to harden and soften
- Other additives inc. bacteria, heat, light, color friction

**Raw Materials**
Oil and natural gas are the major raw materials used in manufacturing plastics. The plastic production process often begins by treating components of crude oil or natural gas in a ‘cracking process’. This process results in the conversion of these components into hydrocarbon monomers such as ethylene and propylene.

Further processing leads to a wider range of monomers such as styrene vinyl chloride, ethylene glycol, terephthalic acid and many others. These monomers are then chemically bonded into chains called polymers. The different combinations of monomers yield plastics with a wide range of properties and characteristics.

**SUSTAIN BY DESIGN**
Sustain by Design was a studio on investigating the Sustainable Development Goals in creative and critical ways.
Art and Design students engaged with specific issues on the ground in Bangalore, India.

SDGs Project Lead: Forum for Law, Environment, Development and Governance (FLEDGE).
Poster created in collaboration with:
Graduate students at the Srishti Institute of Art, Design and Technology:
Anupika Gupta, Pritpal Jain, Shreyas Dhuliya and Tejasvi Srinivas Babu.