Thermoplastics

A polymer that can become moldable to a specific heat and the get solidify upon cooling are known as the thermoplastics. These thermoplastics can be remoulded or reshaped many times as we want. so they are recyclable polymers.

Thermosets

These are the polymers which are capable to resist to high temperatures. Once thermosets get harden they will not be remoulded or reshaped. So these are not able to recycle. Capable of resistance to the high temperatures.

Elastomers

The elastomer is a polymer that can be deformed under stress and regain its original shape when the stress is removed. Simply a polymer which is having an elastic property called as the elastomer.

Ceramics

Ceramics are the inorganic and nonmetallic compounds. Ceramics have high strengths and hardness properties. Following examples gives the quick idea of ceramic materials.

Examples of Ceramics are plates, tiles, toilets. Not only in home appliances they are also can be used in so many other industries like automobile industries, aerospace industries.

Composite Materials

A composite material is a material formed from two or more materials to attain required properties like high strength with light in weight.

Example of the composite material is a plywood. Plywood is a composite material from a composite of different wood materials. Fibreglass is also one example of the composite material from reinforced plastics.

Composite materials are Further classified into three groups.

- Metal Matrix
- Ceramic Matrix
- Polymer Matrix

Properties of Engineering Materials

Materials have different properties depending on what they are used for. Some materials are hard, others are soft. These are types of materials most commonly used in everyday life are given below.

- Physical Properties of Materials
- Chemical Properties of Materials
- Thermal Properties of Materials
- Electrical Properties of Materials
- Magnetic Properties of Materials
- Mechanical Properties of Materials