B.Sc. Semester-VI Organic Chemistry Paper-XIV

2. Synthetic Polymers

Coverage:

16. (i) Neoprene

(ii) Polystyrene



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Neoprene

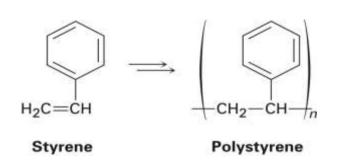
It is produced by the polymerization of chloroprene. Chloroprene monomers binds and creates polychloroprene chips. The chips are then melted and mixed with various foaming agents and carbon pigments. This mixture is then baked until it expands. The end result is sheets of neoprene. Neoprene is sold either as solid or in latex form.

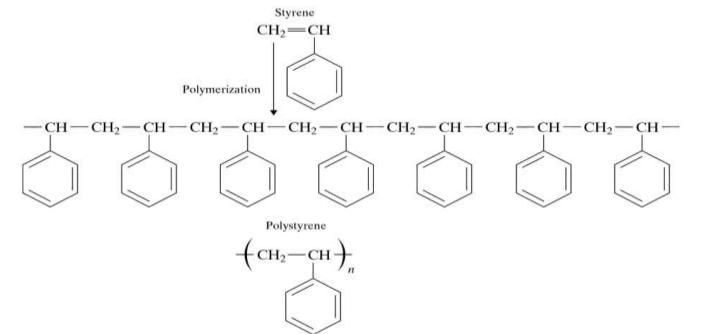
$$CH_{2} \stackrel{\longleftarrow}{=} CH \stackrel{\longleftarrow}{=} CH_{2} \stackrel{\longleftarrow}{=} CH_{2} \stackrel{\longleftarrow}{=} CH \stackrel{\longleftarrow}{=} CH_{2} \stackrel{\longleftarrow}{$$

- 1. This is an homopolymer.
- 2. Synthetic elastomer is used because of its resistance to heat and solvents.

Polystyrene

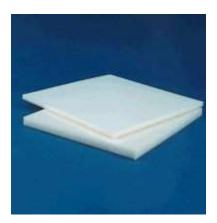
Polystyrene is a synthetic polymer made from the monomer known as styrene. Polystyrene can be solid or foamed. It is an inexpensive resin per unit weight.







Polystyrene Rolls



Polystyrene Sheets