

THE POLYMERIZATION OF VINYL MONOMERS

The polymerization of vinyl monomers is a complex process involving several steps. The first step is the initiation of the reaction, which is typically initiated by a free radical species. This species attacks the double bond of the monomer, forming a radical intermediate. This intermediate then reacts with another monomer molecule, leading to the growth of the polymer chain. The process continues until the reaction is terminated, either by the addition of a chain transfer agent or by the termination of the radical species.

1.1. Initiation and Propagation

The initiation step is the first step in the polymerization process. It involves the formation of a radical species, which then attacks the double bond of the monomer. This leads to the formation of a radical intermediate, which is then able to react with another monomer molecule. This process is repeated, leading to the growth of the polymer chain. The propagation step is the second step in the polymerization process. It involves the reaction of the radical intermediate with another monomer molecule, leading to the growth of the polymer chain. This process is repeated until the reaction is terminated.