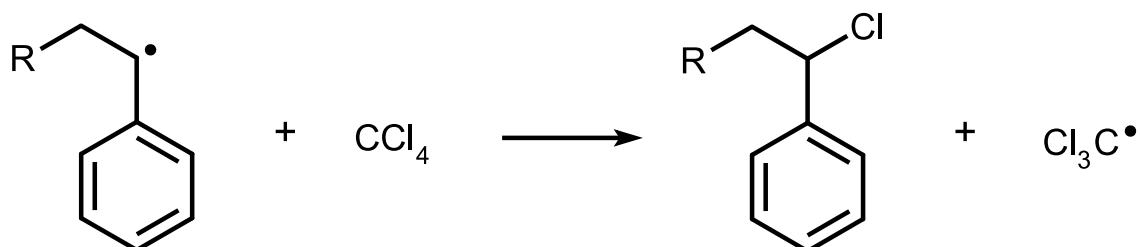
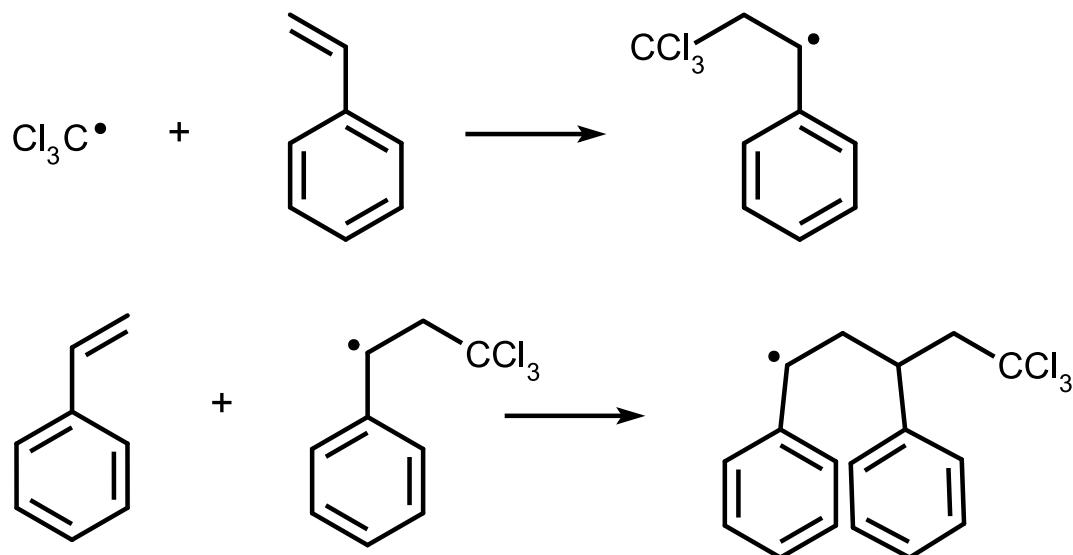


chain transfer

The abstraction, by the radical end of a growing chain-polymer, of an atom from another molecule. The growth of the polymer chain is thereby terminated but a new radical, capable of chain propagation and polymerization, is simultaneously created. For the example of alkene polymerization cited for a chain reaction, the reaction:



represents a chain transfer, the radical $\text{Cl}_3\text{C}^\bullet$ inducing further polymerization:



The phenomenon occurs also in other chain reactions such as cationic polymerization.

See also: telomerization

Source:

PAC, 1994, 66, 1077 (*Glossary of terms used in physical organic chemistry (IUPAC Recommendations 1994)*) on page 1094