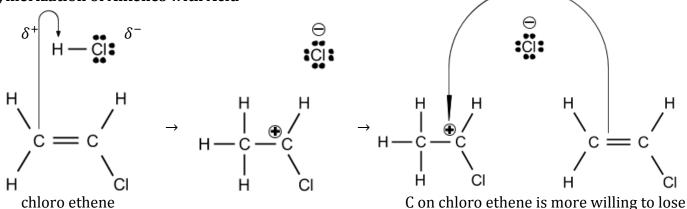
Polymerization of Alkenes with Acid

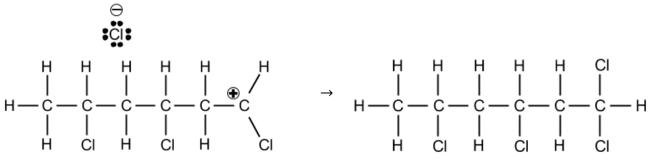


an e-than the Cl-is

chloro ethene attaches

(vinyl chloride)

another chloro ethene loses an e



process continues until no more chloro ethene is present in solution, then Cl-bonds to chain

Chains are formed by continuous attachment of chloro ethene onto the carbocation.

Once all the chloro ethene has been exhausted and is attached to the chain the Cl⁻ is now able to attach to the carbocation.

With the attachment of the Cl- onto the carbocation there is no longer a positive charge on any C and the chain is stable.

$$H_3C$$
 — CH — CH_2 — CH — CH_2 — CH_2

Poly vinyl chloride