Superabsorbent Polymer Network:

Water molecules are drawn into the network across a diffusion gradient - formed by the Sodium neutralization of the polymer backbone. The polymer chains want to straighten but cannot due to the cross-linking. Thus, the particles expand as water moves into the network.

The water is held in the network by Hydrogen-bonding.

*Waste Lock*® Superabsorbent Polymers

The *Waste Lock*® 770 product is a an acrylate homo-polymer than is 60-70% Sodium neutralized.

Also available are co-polymers of acrylate & acrylamide (*Waste Lock*® PAM). These polymers provide higher absorbency under extreme salty conditions.
Superabsorbent Polymer Structure
Cross-linked Polyacrylate (Sodium)