

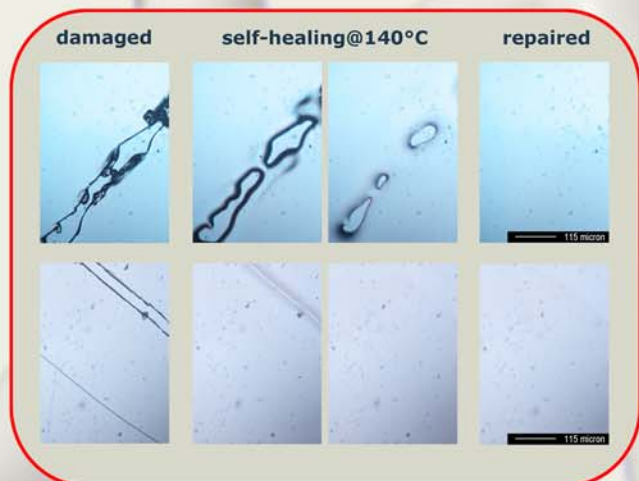
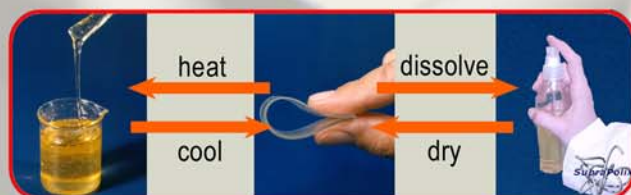
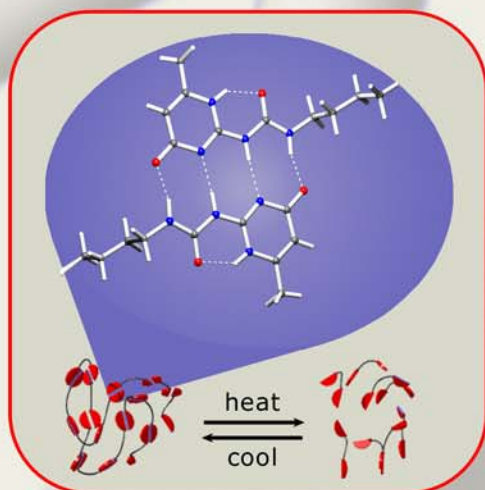
SupraMolecular polymers@work

SupraPolix and Self Healing

SupraPolix brings a new concept to the world of plastics: excellent material properties without losing easy processing by incorporation of *SupraB*.

SupraB is based on *SupraPolix*'s proprietary reversible hydrogen bonding approach, resulting in strong SupraMolecular interactions that allow:

- tunable strength of the *SupraB*-materials
- strong elastic materials at room temperature
- a low viscous melt at elevated temperatures
- unlimited number of self-healing cycles



SupraB: strength and flow combined

SupraB creates reversible networks in polymeric materials resulting in visco-elastic behavior. The elastic component takes care of the desired material properties, like strength, elasticity and toughness, whereas the viscous component becomes predominant at elevated temperatures and gives the material its flow characteristics that are needed to repair damage.

The picture on the left shows self-healing in action. Two different coatings (an elastomer and a polysiloxane), damaged by scratching, heal themselves at elevated temperatures resulting in nice smooth films again.

