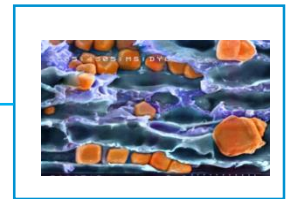
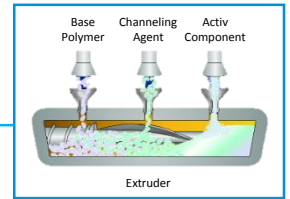


## Activ-Polymer™ Technology

- ✓ In house compounding of Activ-Polymer™ technology = **3-Phase Polymers**:
  - 1) A **Majority Polymer** = base structure component
  - 2) A **Channeling Agent** = minority polymer (not miscible in majority polymer)
  - 3) An **Active Component** = adsorption or absorption of elements / gases
- ✓ The channeling agent creates channels within the polymer and allows movement of humidity and gases. The diffusion is controlled through the channel agent
- ✓ The Active Components can adsorb or absorb different elements (moisture, gases, reactive impurities, odors, formaldehyde and other volatiles) and also release elements (aromas, biocides, nutrients, carbon dioxide)
- ✓ The **Activ-Polymer™** technology can be **extruded**, **injection molded** and **blow molded**. The performance (kinetics, capacity, mechanical properties) can be **individually designed** according to the particular requirements of projects through adapted formulations



## Potential Products & Applications

- ✓ **Activ-Film™** materials: standard product for adsorption of different elements (moisture, gases, etc.) - combined formulations available (e.g. moisture + oxygen)
  - Optimized capacity and uptake rates (scavenging or release rate of the film can be modified by selecting ratio and type of channeling agent)
  - Different formats: Continuous Film (applied by heat-staking), Die-Cut parts and Self-Adhesive backed labels
- ✓ **TROPApuck™**: standard product, virtually indestructible injection-molded plastic component, food-safe, virtually sterile
- ✓ **Molded components**: individual designs that can be used as integral components of devices. Very tight dimensional tolerances can be fulfilled
  - Can serve a dual role in the device: replace an existing component in the physical structure of the existing design to provide structure and protection simultaneously
  - The advantage: control of moisture within the environment without the need for extra space, additional parts or changes to the existing design



Activ-Film™ materials



TROPApuck™ scavenging devices



Active Molded Components