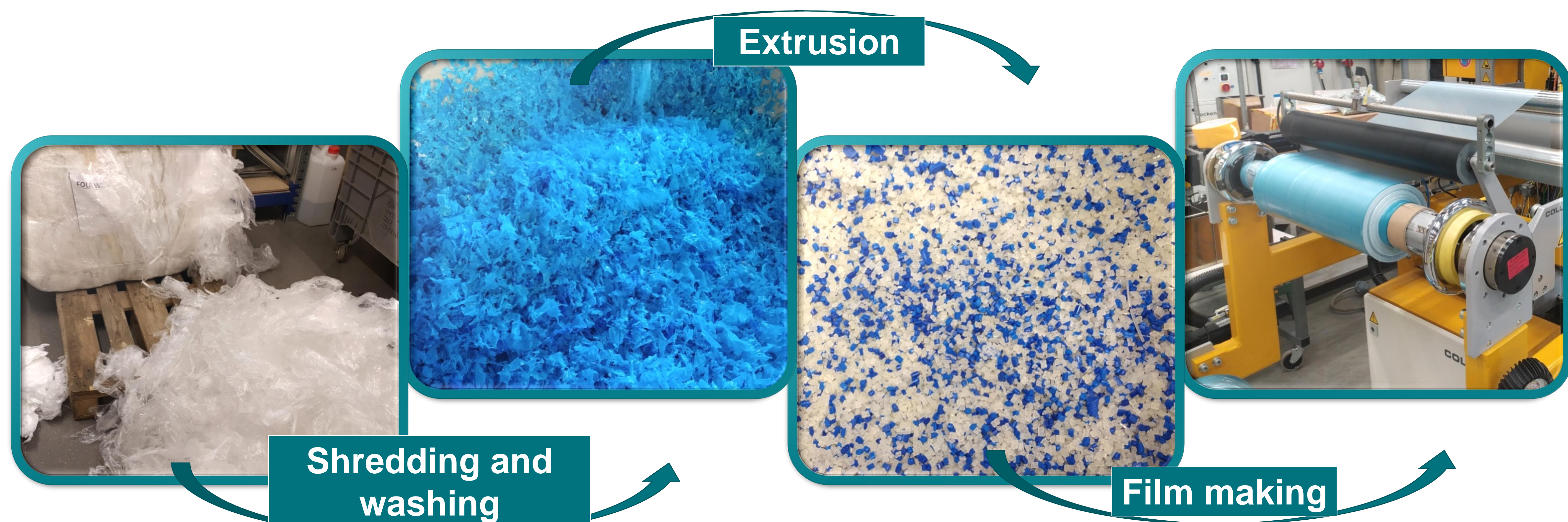
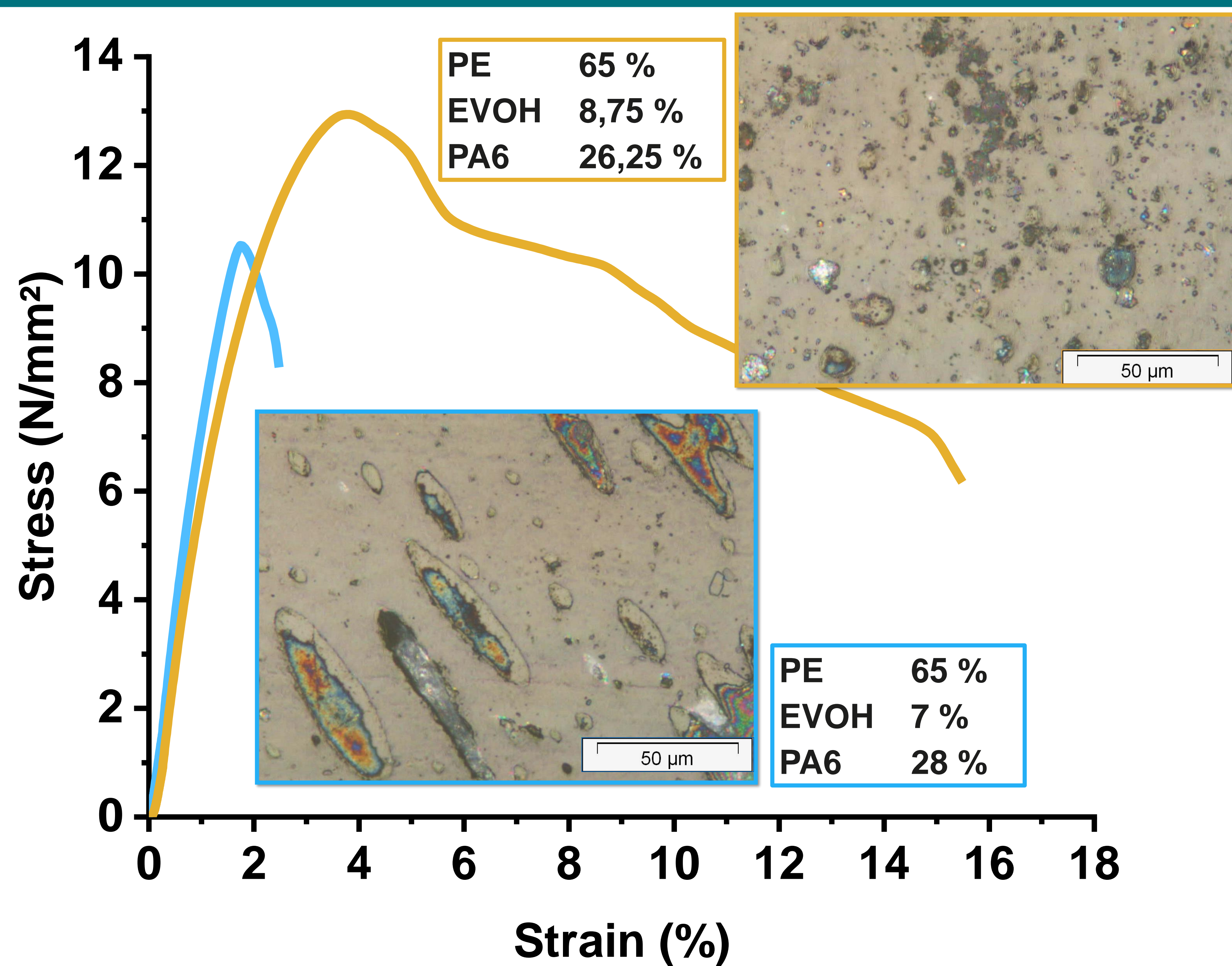


I. Recycling process



Multilayer films from food packaging are usually used only once, mostly because of their composition of immiscible polymers. With the right recycling process, they can be however used again as packaging material. Process itself consists of washing and removing paper labels, shredding, extrusion, compounding and film making.

II. Different ratios of polymers



Matrix

- ❖ consists of PE – LDPE and/or LLDPE
- ❖ carrier of high strain at the break

Minor phase

- ❖ consists of PA6 and EVOH in different ratios
- ❖ increase stiffness

III. Conclusion

- ❖ Partial replacement of LDPE with LLDPE leads to better mechanical properties without a compatibilizer.
- ❖ Different ratios of PA6-EVOH change the morphology of blends and therefore affect mechanical properties.
- ❖ Overall shrinkage of recycled film is smaller than that of conventional shrink film.
- ❖ Short-time shrinkage in hot air is comparable to recycled and conventional shrink film.