Undergraduate Project Summary MSE497A



Biodegradable Elastomer's Aqueous Washing

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Objective

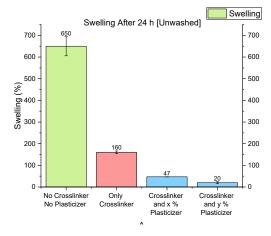
To study the change in mechanical strength and swelling behaviour of the biodegradable elastomer.

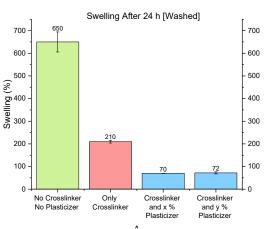
Film Preparation

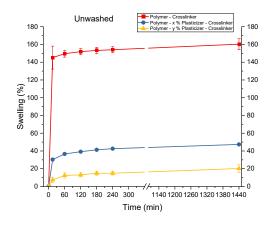
Solution Casting of the PVA based elastomers is used to prepare the film, which was then crosslinked and washed to test the tensile and swelling properties. The change in properties for the optimal film is only in given below

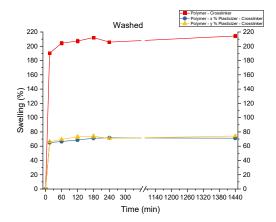
Results

1. Swelling of unwashed/Washed film

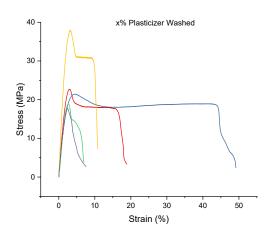


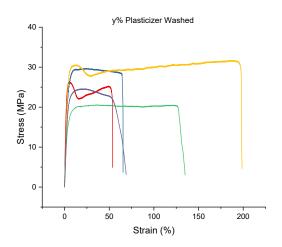


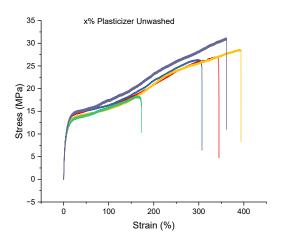


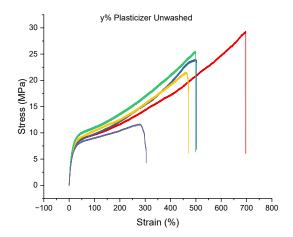


2. Tensile Behaviour









Conclusion

The optimal film shows **300% reduction** in the strain and **50% increase** in the swelling behaviour.