

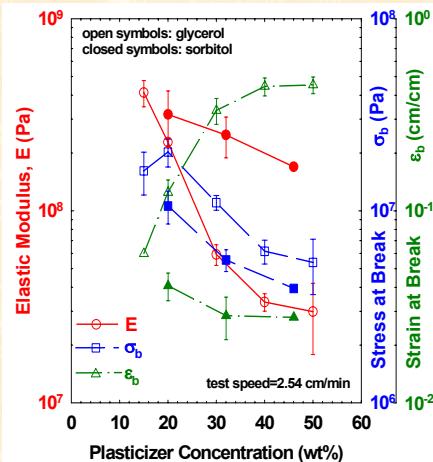


NOVEL KERATIN POLYMER BLENDS

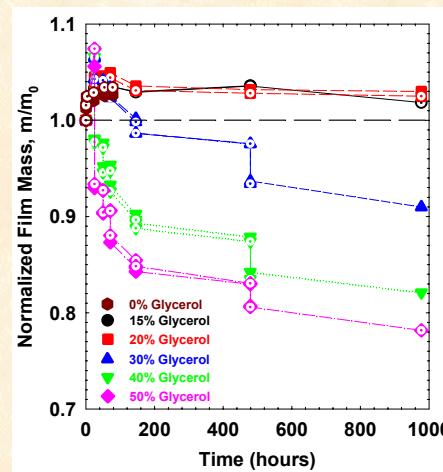
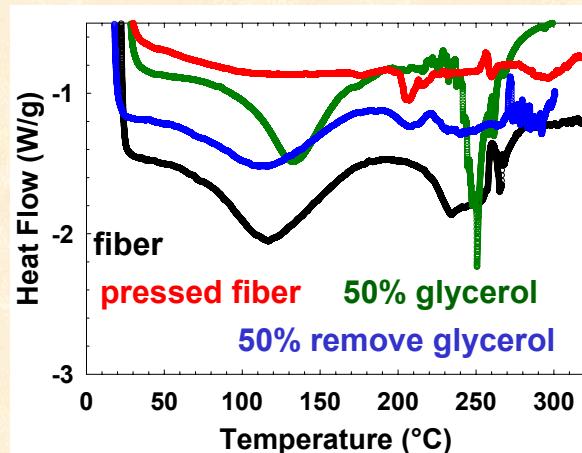
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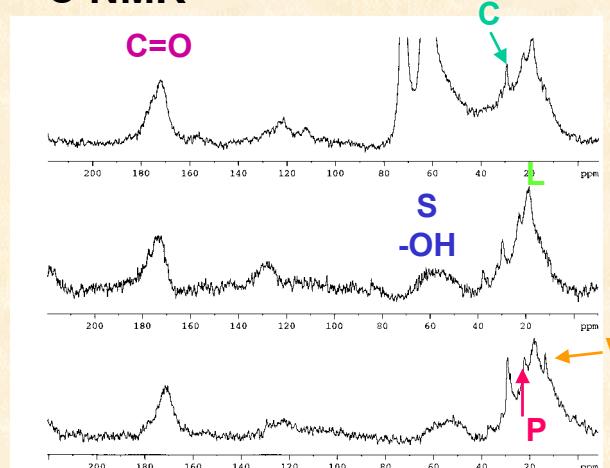


Properties of blends depend on amount and molecular weight of 2nd phase.



Films retain -OH containing 2nd phase equal to amount of -OH containing amino acid (S,T,Y) in feather keratin.

¹³C NMR



DSC and NMR show glycerol replaces H₂O in protein structure and hydrogen bonds. Crystallinity is disrupted and cross-links remain.

30% glycerol

pressed fiber

fiber