

DMAC/LiCl용매를 이용한 셀룰로오스 섬유 제조와 물성

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Cellulose filaments were produced from cellulose solution with 9%(w/w) LiCl/DMAC using a laboratory scale wet spinning machine. A fiber spun had tenacity of 2.9g/d and initial modulus of 72g/d. The mechanical properties of the fibers are shown to be improved comparing with those of viscose rayon. And the tensile properties of spun fibers are strongly influenced by various coagulation variables. The tenacities of regenerated cellulose fibers were found to increase with increasing draw ratio and LiCl concentration in coagulation bath respectively, and they were found to decrease with increasing bath temperature. A 3% cellulose solution was spun into three different coagulants comprising methanol, ethanol, water. The water was the best coagulant in this study.