

**DEGRADASI POLIBLEND POLI(ASAMLAKTAT-KO-ASAMGLIKOLAT)  
DENGAN POLI( $\epsilon$ -KAPROLAKTON) SECARA *IN VITRO***

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**ABSTRACT**

Polymer has many applications in human life, one of them is in the field of health. Polymer synthetics like polylactic acid (PLA), polyglycolic acid (PGA), poly( $\epsilon$ -caprolactone) (PCL), and poly(lactic acid-co-glycolic acid) (PLGA) were kind of polyesters that is many used in field of health. Many researchers have already made research about degradation of PLA, PGA, PCL, and PLGA. However, there is no one doing research about degradation of combination between this two polymers, one of them is polyblend of PLGA and PCL. Polyblend were made of four compositions, that were PLGA(90:10):PCL 3:1, PLGA(75:25):PCL 3:1, PLGA(90:10):PCL 5:1, and PLGA(75:25):PCL 5:1. Degradation was carried out for eight weeks by using phosphate buffer pH 7.4 and incubation temperature of 37°C. Degradation of the polymer was observed by mass remained, and intrinsic viscosity. The result showed that composition PLGA(75:25):PCL 5:1 was the fastest in degradation compared to other compositions. It was showed by the decrease in mass until 89.06% and the change in intrinsic viscosity until 20.13%.

**Keywords:** PLGA, PCL

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