## Characterization of Cleaning Ability of Polluted Fibers by an Ecofriendly Polymer Detergent

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The ecofriendly detergent were made by biodegradable polymer. There are various tests to measure a washing ability of test fabrics. Chitosan has many useful properties such as biocompatibility, biodegradability, antimicrobial activity, wound healing property, etc. In addition, chitosan is expected to be useful in the development of adsorption materials such as blends with other polymers, since chitosan has many functional groups. In this study, a characterization of detergent compared on detergency, strain removal, content of heavy metal, content of  $P_2O_5$ , and biodegradation. The results showed that the detergent had biodegradable and safe properties.