

**POTENSI PENGGUNAAN ECO ENZYME UNTUK MENINGKATKAN KUALITAS UTILIZATION OF DOMESTIC WASTE FOR LIQUID SOAP AND ENZYME CLEANER (ECO ENZYME) BAHAN AKTIF NATURAL ANTIMIKROBA SEBAGAI BAHAN BAKU PEMBUATAN SABUN AND HAND SANITIZER**

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**ABSTRAK**

*Pada era new normal akibat pandemi Covid-19 kesadaran masyarakat akan hygiene pribadi semakin meningkat. Pada penelitian ini dibuat bahan aktif natural antimikroba yaitu Larutan Eco Enzyme dari fermentasi kombinasi limbah kulit buah dan sayuran kemudian diformulasikan dalam pembuatan hand sanitizer dan sabun. Peredaran hand sanitizer dan sabun dengan bahan alami masih sangat sedikit, sebagian besar menggunakan berbagai macam senyawa kimia sintetik sebagai bahan utama pembuatan hand sanitizer dan sabun. Senyawa tersebut dapat mengakibatkan gangguan kesehatan pada kulit, oleh sebab itu dibuatlah alternatif bahan pembuatan hand sanitizer dan sabun dengan bahan alami. Bahan alami yang dapat digunakan sebagai pembuatan hand sanitizer dan sabun yaitu Eco Enzyme. Evaluasi hand sanitizer dan sabun Eco Enzyme meliputi Uji Organoleptik, Uji pH, Uji koefisien fenol dan Daya Jual. Hasil penelitian pada uji organoleptik, uji pH dan uji koefisien fenol telah memenuhi syarat yang telah ditetapkan oleh SNI. Pada pengujian pH untuk hand sanitizer memiliki pH 4,8 sedangkan untuk sabun memiliki pH 9,5 dimana hasil tersebut telah sesuai dengan standar mutu SNI dan pada pengujian koefisien fenol hand sanitizer dan sabun dengan konsentrasi 25% telah memenuhi SNI 1842 tahun 2019.*

**Kata Kunci:** *Eco Enzyme, Hand Sanitizer, Sabun.*

**THE POTENTIAL USE OF ECO ENZYME TO IMPROVE THE QUALITY FROM UTILIZATION OF DOMESTIC WASTE FOR LIQUID SOAP AND ENZYME CLEANER (ECO ENZYME) ANTIMICROBIAL ACTIVE INGREDIENTS AS RAW MATERIALS FOR MANUFACTURING SOAP AND HAND SANITIZER**

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**ABSTRACT**

*In the new normal era due to the Covid-19 pandemic, public awareness of personal hygiene is increasing. In this study, natural antimicrobial active ingredients were made, namely is Eco-enzyme Solution from the fermentation's combination of fruit also vegetable peel waste and then formulated in the manufacture of hand sanitizers and soap. The circulation of hand sanitizer and soap with natural ingredients is still very small, most of them is using the various kinds of synthetic chemical compounds as the main ingredients for making hand sanitizers and soaps. These compounds can cause health problems on the skin, therefore alternative materials for making hand sanitizers and soaps are made with natural ingredients. Natural ingredients that can be used to make hand sanitizer and soap are Eco Enzyme. Evaluation of hand sanitizer and Eco Enzyme soap includes Organoleptic Test, pH Test, Phenol Coefficient Test and Marketability. The result of the research on organoleptic tests, pH tests and phenol coefficient test have met the requirements set by SNI. In the testing of pH for hand sanitizer has a pH of 4,8 while for soap, it has a pH of 9,5 where the results are in accordance with SNI quality standards and in the phenol coefficient's testing of hand sanitizer and soap with a concentration of 25%, it has fulfill of SNI 1842 in 2019.*

**Keywords:** *Eco Enzyme, Hand Sanitizer, Soap.*