

## **ABSTRAK**

### **UJI STABILITAS *FREEZE THAW* SEDIAAN MASKER GEL *PEEL-OFF* KOMBINASI EKSTRAK DAUN KELOR (*Moringa oleifera*) DAN LIDAH BUAYA (*Aloe vera*)**

**Dengan persentase jumlah carbopol 940 yang berbeda Sebagai Gelling Agent  
(Studi dilakukan di Akademi Farmasi Surabaya)**

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Acne is a common skin issue, particularly among adolescents, that can affect appearance and cause discomfort. Antioxidants can help manage acne and protect the skin. Moringa leaves and aloe vera are effective plants for acne treatment due to their antioxidant and antibacterial properties. Moringa leaves contain flavonoids, saponins, and tannins, while aloe vera is rich in anthraquinones, minerals, and enzymes beneficial for skin health and beauty. This study aims to evaluate the physical stability of peel-off gel formulations using the freeze-thaw method to determine if varying concentrations of carbopol (0.5%, 0.75%, and 1%) remain stable after storage through certain cycles.

The research involves formulating moringa leaf and aloe vera extracts into a peel-off gel mask, followed by descriptive analysis for organoleptic characteristics and homogeneity. Statistical analysis was performed to test spreadability, drying time, and pH using the normality test (Shapiro-Wilk) at a 95% confidence level. The results indicate that the peel-off gel mask formulations of moringa leaf and aloe vera extracts with carbopol concentrations of 0.5%, 0.75%, and 1% remain stable in terms of organoleptic properties, homogeneity, and pH after the freeze-thaw test from cycle 0 to cycle 6. For pH and drying time tests, formula 3 showed significant differences before and after the freeze-thaw test but still met the specifications. In conclusion, the peel-off gel mask formulations combining moringa leaf and aloe vera extracts with various carbopol concentrations remain stable after the freeze-thaw test, with significant differences only observed in formula 3, which still meets the specifications.

**Keywords:** *Freeze thaw, aloe vera, moringa oleifera, carbopol*