

## **ABSTRACT**

### **ANALYSIS OF FORMALDEHYDE CONTENT IN SHAMPOO AND CONDITIONER COSMETIC PRODUCTS CIRCULATING IN THE COMMUNITY USING THE CHROMOTROPIC ACID METHOD**

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Formalin has been proven to be dangerous for health, but its use is still permitted within certain limits by BPOM. This study aims to detect the presence of formaldehyde in samples of shampoo and conditioner hair care products sold in offline shops and shopping centers in Surabaya, as well as through online purchases. Sampling was carried out using the purposive sampling method. The sample size is based on certain criteria determined by the researcher. The research sample consisted of 36 shampoo samples and 21 conditioner samples. The test was carried out semi-quantitatively using the chromatropic acid method. The research results showed that from 36 shampoo samples, 4 shampoo samples were found to be positive, with concentrations >2000ppm exceeding BPOM requirements. These four products use formalin preservatives, DMDM hydantoin, and Iodopropynyl butylcarbamate. Meanwhile, from observations of 21 conditioner samples, 13 samples were declared positive but were still within safe limits according to BPOM regulations.

**Keywords :** *Chromotropic Acid, Formaldehyde-Releaser, Shampoo, Conditioner*