

ABSTRACT

THE EFFECT OF THE ADSORBENT MASS OF BANNA PEEL ON THE ACIDVALUE OF USED COOKING OIL

Nurul Wahidah Maulidiyah

Used cooking oil refining process can be done through the adsorption process. This study used banana peel as an adsorbent because banana peels contain cellulose and antioxidants. This study aims to determine the effect of variations in the mass of banana peel adsorbents on decreasing the acid number of used cooking oil. The mass variations used are 2, 4, 6, 8 and 10 gram in 100 ml of used cooking oil for 60 minutes. Acid number testing was carried out by the alkalimetric method. The result of the best decreasing in acid number were 2 gram of adsorbent mass with an acid value of 2.6194 mgKOH/g and a reduction efficiency value of 17,8955 %.

Keyword: adsorbent, banana peel, activation, cooking oil, adsorption