## ABSTRACT

## (Literature Review)

## THE EFFECT OF ADSORPTION TIME TO DECREASE ACID NUMBER ON USED COOKING OIL USING ACTIVE CHARCOAL ADSORBENT

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Abstract : Used cooking oil is one of the basic needs that cannot be separated from our daily lives. However, the obstacle that we often face is the waste from the remaining cooking oil which contains high free fatty acids (FFA). High free fatty acids can cause various diseases, one of which is cancer and cholesterol. Adsorption with activated charcoal is the most effective, easy and inexpensive way compared to esterification to reduce free fatty acid levels in used cooking oil. The longest contact time of activated charcoal adsorbent and the smallest particle size can reduce the acid number up to 77.9%. Thus activated charcoal can be used as an adsorbent that has a strong absorption capacity.

Keyword : cooking oil, waste, fatty acid, adsorption.