



Activation of Kosovo Bentonite with Sulphuric Acid for Recycling of Used Motor Oils

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Abstract: The main objective of this publication is to handle the recycling of used motor oil, introducing optimal methods of processing acid activated bentonite compared with natural bentonite. Comparative results of chemical analysis of the oil samples analyzed after treatment with these absorbent enabled significant estimates issued on changes specific parameters before and after treatment of the oil. This process consists in removing unwanted components of the oil through the bentonite adsorptive properties of the Republic of Kosovo. And at the same time related to generated oil production, based on a practice ecologically safe, therefore renewed oils or recycled may turn into products, to be reused as base oils or as fuel in the engines of cars or industrial machinery. Results showed that bentonite activation increases specific surface and the cumulative volume, at the same time with increasing the concentration of sulphuric acid. This shows that with increasing concentration up to 30% do not have limits or the optimal amount of acid concentration that takes to obtain as large as possible specific surface area. For extended time of activation to these parameters grow in activated acid samples of 10% and 20% while the acid activated samples of concentration 30% their values are decreased. Also it turns out that oil is not damaged or altered, but rather their effect is best shown regenerative abilities. This method has shown that the basic components of motor oil are maintained and their consistency is not damaged.

Keywords: *recycling used motor oil; sulphuric acid; natural bentonite, activation*

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