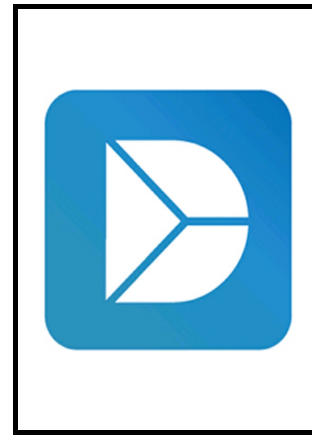


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Data on the treatment of used lubricating oil from two different sources using solvent extraction and adsorption

Temitayo E. Oladimeji, Jacob A. Sonibare, James A. Omoleye, Abiola A. Adegbola, Hilary I. Okagbue



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Data article

Title: Data on the treatment of used lubricating oil from two different sources using solvent extraction and adsorption

Authors: Temitayo E. Oladimeji¹, Jacob A. Sonibare², James A. Omoleye¹, Abiola A. Adegbola¹, Hilary I. Okagbue³

Affiliations:

¹Department of Chemical Engineering, Covenant University, Canaanland, Ota, Nigeria

²Department of Chemical Engineering, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria

³Department of Mathematics, Covenant University, Canaanland, Ota, Nigeria

Corresponding author: T.E. Oladimeji (temitayo.fatoki@covenantuniversity.edu.ng)

Corresponding author: H.I. Okagbue (hilary.okagbue@covenantuniversity.edu.ng)

Abstract

The data in this article were obtained from a research designed to investigate the effects of choice of solvent, mixing speed, temperature and solvent to oil ratio on the treatment process of used lubricating oils using solvent extraction and adsorption method. Various data on the performance of the three solvents chosen were studied and compared based on certain parameters are presented and discussed. From the results obtained, it was observed that MEK (Methyl Ethyl Ketone) had the best performance because it gave the highest sludge removal and closest properties to the fresh lubricating base stock. Furthermore, it was also determined that increase in temperature improved the quality of oil obtained up till 50°C above this temperature poorer quality of oil was observed. But above all the factors investigated, it was concluded that solvent to oil ratio has a greater effect on the quality of oil produced after treatment.

Keywords: Used lubricating oil, Solvent extraction, Adsorption, treatment, sludge, characterization

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