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Esterification of a waste produced from the palm oil industry over 12-tungstophosphoric acid supported on kaolin waste and mesoporous materials

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### Highlights

- Kaolin waste (MK700), MCM-41, MCM-48, and SBA-15 were impregnated with  $\text{H}_3\text{PW}_{12}\text{O}_{40}$ .
- Catalysts were active in the esterification of a waste from palm oil deodorization.
- The process with supported HPW on MK700, MCM-41, MCM-48 and SBA-15 is heterogeneous.

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