

## Transesterification of RBD palm oil using supercritical methanol and co-solvent in batch reactor

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Transesterification of RBD(Refined, Bleached and Deodorized) palm oil using supercritical methanol has been carried out without catalyst. Supercritical process requires the shorter reaction time and simpler purification procedure since alkali catalyst is not used. However compared with the conventional alkali catalyst process, higher temperature and pressure are indispensable to supercritical process. Co-solvent was added to the reactant mixture for mild experimental condition (temperature, pressure and molar ratio of alcohol to vegetable oil). With several co-solvents in the reactant mixture, there were significant changes in the contents of FAMES under experimental conditions used in the conventional supercritical process.