Institute of Chemical Engineering

Investigations on the application of enzymes in the synthesis of octyl esters of medium-chain fatty acids

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Abstract: Octyl esters of medium-chain fatty acids were synthesized in the presence of commercially available enzyme lipase acrylic resin as catalyst in the range of temperatures 313 K - 333 K, at initial mole substrate ratio (alcohol to acid), b, 1/1, 2.5/1, 3/1, 5/1. The important advantage is relatively low reaction temperature of 323 K. High conversion of acid has been obtained and only small amounts of side products.

Attachments:

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