

Process to synthesize cerides (NT004)

Cerides are usually obtain by esterification reaction between a fatty alcohol and a fatty acid. The technology allows the production of cerides (or long chain symmetric esters) from corresponding fatty acid methyl esters (FAMES). The same process allows a smart access to fatty alcohols.

Keywords: Cerides, FAMES, Fatty alcohols, Hydrogenation, Dehydrogenation

Intellectual property: WO2015/067900 A1 (Entry into the national phases : Europe, USA, Canada, Brazil, Malaysia)

> Presentation of the technology : Fatty alcohols and/or cerides synthesis from FAMES

- "One-pot" cascade reaction (hydrogenation-dehydrogenation)
- Highly selective process with good conversion
- Low concentration in recyclable catalyst (0.1%mol)
- No reduction of potential double bonds
- Technology developed for the synthesis of myristyl myristate and oleyl oleate
- Smart access to fatty alcohols from triglycerides

> Competitive advantages

- Solvent and additive free reaction
- Catalytic process
- High selectivity and conversion
- Oleochemistry

> Applications

- Emollient agents
- Cosmetic industry...

> Development stage

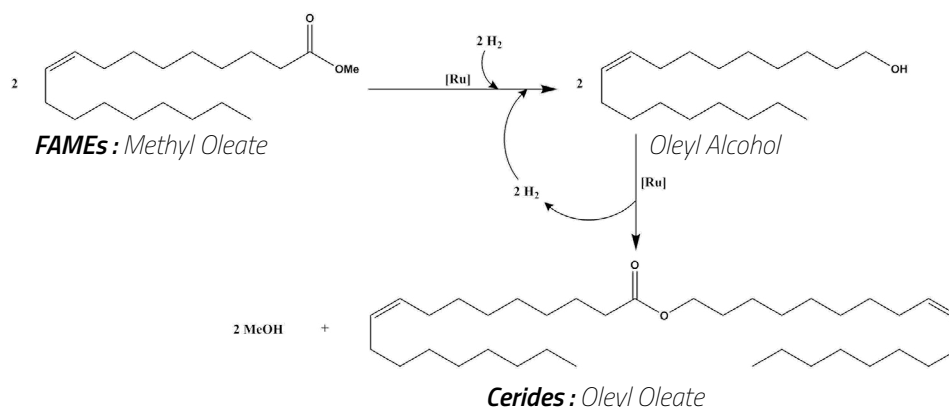
- Technology validation in laboratory environment

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> Development opportunities

- Validation to other FAMES
- Synthesis of fatty alcohols from triglycerides
- Optimization of the catalytic process
- Continuous flow process design

> Technical specifications : Catalysed hydrogenation-dehydrogenation



- Conversion level : 80%
- Selectivity : >99%