

**Low *trans* and Low sat Frying Oils
by new very Selective Single Phase Hydrogenation Process.**

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Traditional hydrogenation of triglycerides is characterised by formation of large amounts of *trans*-fatty acids, due to hydrogen deficiency at the catalyst surface.

By addition of a suitable solvent, a single-phase system with hydrogen, substrate and solvent can be created. In this way the transport resistance between gas and liquid is eliminated and the formation of the *trans*-fatty acids can be avoided [1, 2, 3].

Both low *trans* and low sat has been achieved, by using these very favourable single-phase conditions at very low temperature, e.g. 25°C. [4]

In this way we can make partial hydrogenation with *trans* below 2wt%, and the amount of saturated fatty acids will be low.

Detailed reaction conditions and results will be presented together with information on how this process is being brought to industrial applications.

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