

## Title (en)

Antioxidant additive composition, a solution thereof, and a method for improving the storage stability of biodiesel fuel (variants)

## Title (de)

Antioxidationszusatzstoffzusammensetzung, Lösung daraus und Verfahren zur Verbesserung der Lagerstabilität von Biodieselskraftstoff (Varianten)

## Title (fr)

Composition d'additif anti-oxydant, solution associée et procédé d'amélioration de la stabilité de stockage de carburant biodiesel (variantes)

## Publication

**EP 2500402 A1 20120919 (EN)**

## Application

**EP 11176692 A 20110805**

## Priority

RU 2011110454 A 20110318

## Abstract (en)

This invention relates to the petrochemical industry, in particular, to a method for improving the storage stability of biodiesel fuel via using an antioxidant additive. A method for improving the storage stability of biodiesel fuel, comprising addition of an alkylphenol-based antioxidant additive via providing an initial solution that contains 6 to 48 mass % of the alkylphenol-based composition comprised of, mass %: 2,6-di- tert -butyl-4-methylcyclohexanone - 0.2 - 0.3; 2,6-di- tert -butylphenol - 0.7 - 6.0; 2- sec -6- tert -butyl- p-cresol- 1.5 - 5.0; 4,6-di- tert -butyl- o -cresol - 3.0 - 8.0; 2,4-di- tert -butylphenol - 0.3 - 0.5; 2,4-di- tert -butyl-6-dimethyliminomethylphenol- 2.0 - 5.0; 4,4-methylene-bis(2,6-di- tert -butylphenol) - 0.1 - 0.3; and 2,6-di- tert -butyl-4-methylphenol - to the balance, dissolved in biodiesel fuel; and adding the solution of the composition to the biodiesel fuel to reach a concentration of the composition of from 0.002 to 1.6 mass % based on the entire biodiesel fuel solution. The technical result consists of a considerable improvement of the storage stability of biodiesel fuel with a reduced amount of the antioxidant additive. The antioxidant additive used inhibits precipitation during the shelf life of biodiesel fuel for a longer period of time.

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## DOCDB simple family (application)

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