

Title (en)
POLYMERS AS ADDITIVES FOR FUELS AND LUBRICANTS

Title (de)
POLYMERE ALS ADDITIVE FÜR KRAFT- UND SCHMIERSTOFFE

Title (fr)
POLYMÈRES UTILISÉS EN TANT QU'ADDITIFS POUR CARBURANTS ET LUBRIFIANTS

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Abstract (en)
[origin: WO2018188986A1] The invention relates to the use of copolymers obtainable by - in a first reaction step (I) - copolymerization of (A) at least one ethylenically unsaturated mono- or dicarboxylic acid or derivatives thereof, preferably a dicarboxylic acid, (B) at least one α -olefin having from at least 12 up to and including 30 carbon atoms, (C) optionally at least one further aliphatic or cycloaliphatic olefin comprising at least 4 carbon atoms, which is distinct from (B), and (D) optionally one or more further copolymerizable monomers which are distinct from the monomers (A), (B) and (C), selected from the group consisting of (Da) vinyl esters, (Db) vinyl ethers, (Dc) (meth)acrylic acid esters of alcohols comprising at least 5 carbon atoms, (Dd) allyl alcohols or ethers thereof, (De) N-vinyl compounds selected from the group consisting of vinyl compounds of heterocycles containing at least one nitrogen atom, N-vinyl amides or N-vinyl lactams, (Df) ethylenically unsaturated aromatics, (Dg) α,β -ethylenically unsaturated nitriles, (Dh) (meth)acrylic acid amides and (Di) allyl amines, followed by - in a second reaction step (II) - partial or complete reaction of anhydride or carboxylic acid functionalities present in the copolymer obtained in (I) with at least one compound (E) which contains at least one alcohol group or at least one amino group and at least one carboxylic acid group or at least one carboxylic acid ester group, and - in a third reaction step (III) - hydrolysis of the anhydride functionalities present in the copolymer obtained in (II) and/or partial or complete saponification of carboxylic acid ester functionalities present in the copolymer obtained in (II) as a fuel or lubricant additive, in particular as a diesel fuel additive.

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