

Title (en)

POLYMERS WITH H-BRIDGE FORMING FUNCTIONALITIES FOR IMPROVING ANTI-WEAR PROTECTION

Title (de)

POLYMERE MIT H-BRÜCKEN BILDEN FUNKTIONALITÄTEN ZUR VERBESSERUNG DES VERSCHLEISSCHUTZES

Title (fr)

POLYMERES A FONCTIONNALITES FORMANT DES PONTS H, UTILISES POUR AMELIORER LA PROTECTION CONTRE L'USURE

Publication

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Application

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Abstract (en)

[origin: WO2005097956A1] The invention relates to lubricating oil formulations comprising copolymers or graft copolymers produced by radically polymerising polymerisable monomers and, in addition comprising long-chain ethylenically unsaturated compounds containing alkyl, in particular acrylate or methacrylate substitutes provided with hydrogen-bridge donator functions. The monomer exhibiting a hydrogen-bridge donator property is contained, according to said invention, in the polymer backbone or in graft side branches. Apart from the polymers containing monomers provided with hydrogen-bridge donator functions, said invention relates to polymers containing monomers simultaneously carrying donator and acceptor functions. It was found that the hydrogen-bridge donator functions of a polymer, in particular a simultaneous availability of the hydrogen-bridge donator and acceptor functions produce the positive effects on the anti-wear protection and on a detergency and dispersancy action. The inventive polymers are suitable, in the form of additives, for lubricating oil formulations, for example for motor oils or hydraulic fluids exhibiting an improved anti-wear behaviour.

IPC 8 full level

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