

Title (en)

A two-stroke cycle lubricant composed of a vegetable oil and an additive package.

Title (de)

Aus einem Pflanzenöl und einer Zusatzkonditionierung zusammengesetztes Zweitaktzyklusschmiermittel.

Title (fr)

Lubrifiant pour cycle deux-temps composé d'une huile végétale et d'un conditionnement d'additifs.

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Application

EP 93305348 A 19930708

Priority

US 91096092 A 19920709

Abstract (en)

This invention relates to a nitrogen-containing soluble organic composition comprising a combination of: (A) at least one natural oil comprising an animal oil or vegetable oil comprising a triglyceride of the formula <CHEM> wherein R<1>, R<2> and R<3> are independently saturated or unsaturated aliphatic hydrocarbyl groups containing from about 8 to about 24 carbon atoms and (B)(I) a detergent/dispersant comprising at least one acylated, nitrogen-containing compound having a substituent of at least 10 aliphatic carbon atoms made by reacting a carboxylic acylating agent with at least one amino compound containing at least one -NH group, said acylating agent being linked to said amino compound through an imido, amido, amidine, or acyloxy ammonium linkage. In another embodiment, the invention comprises a nitrogen-containing soluble organic composition comprising a combination of: (A) the natural oil as described above with (B) at least one detergent-dispersant selected from the group consisting of (I) the acylated, nitrogen-containing compound as described above, (II) at least one neutral or basic metal salt of an organic sulfur acid, phenol or carboxylic acid; (III) at least one hydrocarbyl-substituted amine wherein the hydrocarbyl substituent is substantially aliphatic and contains at least 12 carbon atoms with the proviso that said amine is not the amino phenol (C); and (IV) at least one nitrogen-containing condensate of a phenol, aldehyde and amino compound having at least one -NH group; and (C) at least one amino phenol of the general formula <CHEM> wherein R<4> is a substantially saturated, hydrocarbon-based substituent of at least 10 aliphatic carbon atoms; a, b and c are each independently in integer of one up to three times the number of aromatic nuclei present in Ar with the proviso that the sum of a, b and c does not exceed the unsaturated valences of Ar; and Ar is an aromatic moiety having 0-3 optional substituents selected from the group consisting of lower alkyl, lower alkoxy, nitro, halo or combinations of two or more of said substituents.

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