

LUBRICATING OIL COMPOSITION AND ADDITIVE THEREFOR HAVING IMPROVED PISTON DEPOSIT CONTROL AND EMULSION STABILITY

Abstract

A lubricant additive composition, a method for reducing engine deposit formation and a method for improving emulsion stability of a lubricant composition. The lubricant additive composition includes (a) an organomolybdenum compound contributing from about 20 to no greater than 300 ppm by weight molybdenum to the lubricant composition based on a total weight of the lubricant composition containing the additive composition; (b) a boronated hydrocarbyl substituted succinimide dispersant; and (c) a reaction product of (i) a hydrocarbyl-dicarboxylic acid or anhydride, (ii) a polyamine, (iii) a dicarboxyl-containing fused aromatic compound, and (iv) a non-aromatic dicarboxylic acid or anhydride. The hydrocarbyl group of the hydrocarbyl-dicarboxylic acid or anhydride has a number average molecular weight of greater than 1800 Daltons as determined by gel permeation chromatography. A weight ratio of (b) to (c) ranges from about 1:1 to about 4:1.

No available figure