

Title (en)  
Lubricating oil composition

Title (de)  
Schmierölszusammensetzung

Title (fr)  
Composition d'huile lubrifiante

Publication  
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Application  
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Abstract (en)  
[origin: EP0768366A1] Disclosed herein is a lubricating oil composition containing a major portion of a lubricating base oil and a minor portion of additives comprising a zinc di (primary alkyl) dithiophosphate and a zinc di (secondary alkyl) dithiophosphate in proportions to give a weight ratio in phosphorus content of from 20:80 to 80:20, a sulfur compound in a proportion to give a sulfur content of from 300 to 1,200 ppm (weight basis), and an oxymolybdenum sulfide dithiocarbamate or an oxymolybdenum sulfide dithiophosphate in a proportion to give a molybdenum content of from 200 to 2,000 ppm (weight basis). The lubricating oil composition according to the present invention has excellent antiwear properties and even at elevated temperatures and in the presence of nitrogen oxides, exhibits high oxidation resistance and retains good friction-reducing properties, so that it can be suitably used as a lubricating oil for internal combustion engines.

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Cited by  
US12006483B2; WO2010142724A1; EP2248877A1; EP2060619A4; CN105567380A; EP2078725A4; US2021032528A1; US11697756B2; US2012103299A1; CN102459540A; EP2949738A1; US2022033725A1; US9593291B2; US8309499B2; US9580666B2; US8211840B2; US8084403B2; WO2013083791A1; US7884059B2; US7960321B2; US1199915B2; US11767596B2; US9574158B2; WO2021021888A1; KR101421310B1; WO2008061079A3; WO2021021891A1; WO2022026434A1

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