

LUBRICATING FLUID FOR INTERNAL COMBUSTION ENGINES FUELED WITH ALTERNATIVE COMBUSTION FUELS HAVING HIGH AUTO-IGNITION TEMPERATURES

ABSTRACT

A lubricating oil composition configured for lubricating an internal combustion engine fueled with an alternative fuel having an auto-ignition temperature greater than about 700K. The lubricating oil composition includes at least a detergent system including at least one overbased metal-containing sulfonate detergent, at least one neutral to low-based metal containing sulfonate detergent, and at least one overbased metal-containing phenate detergent where the metal provided from the overbased sulfonate detergent is correctly balanced relative to the total detergent metal and/or the composition total base number.

[Figure 1]