CLAIMS

1. An automotive engine oil composition comprising:

greater than 50 wt.% of a base oil of lubricating viscosity;

an amount of one or more zinc dialkyl dithiophosphate compound(s);

wherein the automotive engine oil composition has a ratio of $KV40^{o}C_{fresh}$ to a weight % of zinc contributed by the one or more zinc dialkyl dithiophosphate compound(s) based on a total weight of the automotive engine oil composition, of greater than 510, wherein $KV40^{o}C_{fresh}$ is the kinematic viscosity of fresh automotive engine oil composition at 40ºC as measured by ASTM D445,

and the automotive engine oil composition has a $KV100^{o}C_{sheared}$ of greater than or equal to 8.0 cP, wherein $KV100^{o}C_{sheared}$ is the kinematic viscosity of the automotive engine oil composition after being stripped for 10 hours at 100ºC, as measured by ASTM D445, and the $KV40^{o}C_{fresh}$ is greater than 40 cSt, as measured by ASTM D445.

2. The automotive engine oil composition of claim 1, wherein the amount of zinc provided by the one or more zinc dialkyl dithiophosphate compound(s) is less than 1500 ppm, based on a total weight of the automotive engine oil composition.

3. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more primary alkyl alcohol(s), one or more secondary alkyl alcohol(s), or combinations thereof.

4. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more primary alkyl alcohol(s) each having an alkyl group with 3 to 8 carbon atoms.

5. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more primary alkyl alcohol(s) selected from the group consisting of n-propyl alcohol, isopropyl alcohol, isobutyl alcohol, n-butyl alcohol, 2-butanol, n-pentyl alcohol, hexanol, methyl isobutyl carbinol, isohexanol, n-heptanol, isoheptanol, octanol, amyl alcohol, and 2-ethylhexanol.

6. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more secondary alkyl alcohol(s) having an alkyl group with 3 to 8 carbon atoms.

7. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from a secondary alkyl alcohol selected from the group consisting of isopropyl alcohol, amyl alcohol, and methyl isobutyl carbinol.

8. The automotive engine oil composition of claim 1, wherein the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more primary alkyl alcohol(s) and one or more secondary alkyl alcohol(s).

9. The automotive engine oil composition of claim 1, further comprising a combination of an overbased calcium sulfonate detergent and an overbased calcium phenate detergent, wherein said combination provides from 800 ppm of calcium to 3000 ppm of calcium, based on a total weight of the automotive engine oil composition,

the overbased calcium sulfonate detergent and the overbased calcium phenate detergent each have a total base number of 200 mg KOH/g or greater, and

the one or more zinc dialkyl dithiophosphate compound(s) is derived from one or more secondary alkyl alcohol(s) having an alkyl group with 3 to 8 carbon atoms.

10. The automotive engine oil composition of claim 1, further comprising a viscosity index improver.

11. The automotive engine oil composition of claim 10, wherein the viscosity index improver is a copolymer of ethylene-propylene having an average molecule weight of from 50,000 to 500,000, as measured by gel permeation chromatography.

12. The automotive engine oil composition of claim 1, further comprising a nitrogen-containing dispersant present in an amount to provide from 50 ppmw to 1000 ppmw of nitrogen to the automotive engine oil composition, based on the total weight of the automotive engine oil composition.

13. An automotive engine oil composition comprising:

greater than 50 wt.% of a base oil of lubricating viscosity;

an amount of one or more zinc dialkyl dithiophosphate compound(s);

wherein the automotive engine oil composition has a ratio of $KV40^{o}C_{fresh}$ to a weight % of phosphorus contributed by the one or more zinc dialkyl dithiophosphate compound(s) based on a total weight of the automotive engine oil composition, of greater than 560, wherein $KV40^{o}C_{fresh}$ is the kinematic viscosity of the fresh automotive engine oil composition at 40ºC as measured by ASTM D445,

and the automotive engine oil composition has a $KV100^{o}C_{sheared}$ of greater than or equal to 8.0 cP, wherein $KV100^{o}C_{sheared}$ is the kinematic viscosity of the automotive engine oil composition after being stripped for 10 hours at 100ºC, as measured by ASTM D445, and the $KV40^{o}C_{fresh}$ is greater than 40 cSt, as measured by ASTM D445.

14. An automotive engine oil composition comprising:

greater than 50 wt.% of a base oil of lubricating viscosity;

an amount of one or more zinc dialkyl dithiophosphate compound(s);wherein the automotive engine oil composition has a $KV100^{o}C_{sheared}$ of greater than or equal to 8.0 cP, wherein $KV100^{o}C_{sheared}$ is the kinematic viscosity of the automotive engine oil composition after being stripped for 10 hours at 100ºC, as measured by ASTM D445, and a $KV40^{o}C_{fresh}$ is greater than 40 cSt, as measured by ASTM D445 and

the automotive engine oil composition has one or both of the following ratios:

a) a ratio of $KV40^{o}C_{fresh}$ to a weight % of zinc contributed by the one or more zinc dialkyl dithiophosphate compound(s) based on a total weight of the automotive engine oil composition, of greater than 510, wherein $KV40^{o}C_{fresh}$ is the kinematic viscosity of the fresh automotive engine oil composition at 40ºC as measured by ASTM D445; and
b) a ratio of $KV40^{o}C_{fresh}$ to a weight % of phosphorus contributed by the one or more zinc dialkyl dithiophosphate compound(s) based on a total weight of the automotive engine oil composition, of greater than 560, wherein $KV40^{o}C_{fresh}$ is the kinematic viscosity of the fresh automotive engine oil composition at 40ºC as measured by ASTM D445.

15. A method of improving the viscosity shear stability of a lubricating oil in an automotive engine, the method comprising adding to a crankcase of the automotive engine the automotive engine oil composition of claim 14.