CLAIMS

1. A gas engine lubricating oil composition having TBN in the range of 4 to 20 as measured by ASTM D2896 and an ash content in the range of 0.2 to 1 mass % as determined by ASTM D874, comprising or made by admixing

   (A) in excess of 50 mass % of the composition of an oil of lubricating viscosity including at least 90 mass % of saturates and no more than 0.03 mass % of sulfur;
   and 50 mass % or less of the composition of:
   (B) a calcium hydroxybenzoate detergent additive providing Ca, expressed as atoms of Ca, in the range of 0.05 to 2 mass% based on the mass of the lubricating oil composition,
   (C) a boron-containing dispersant additive; and
   (D) an aminic or phenolic antioxidant present in an amount of 0.1 to 3 mass % based on the mass of the lubricating oil composition,

   the composition having a boron concentration of less than 90, preferably less than 70, ppm by mass; and where the boron is provided by the boron-containing dispersant additive (C).

2. The composition of claim 1 where (B) is an overbased calcium salicylate detergent.

3. The composition of claim 2 where the calcium salicylate detergent provides Ca, expressed as atoms of Ca, in the range of 0.08 to 0.16 mass % based on the mass of the lubricating oil composition.

4. The composition of any of claims 1 to 3 where the boron concentration is in the range of 10 to 60, preferably 20 to 50, ppm by mass.

5. The composition of any of claims 1 to 4 where the dispersant (C) is N-containing and provides N, expressed as atoms of N, ranging from 0.1 to 1, preferably from 0.2 to 0.8, mass %, based on the mass of the lubricating oil composition.

6. The composition of any of claims 1 to 5 further including, as co-additives (additional to (B), (C) and (D)) in respective minor amounts, one or more dispersants, detergents, anti-wear additives, anti-oxidants, and corrosion inhibitors.

7. A method of lubricating a gas engine comprising the step of operating the engine while lubricating it with the gas engine lubricating oil composition of any of claims 1 to 6.

8. The use of boron at a concentration of less than 90 ppm by mass, provided by a boron-containing dispersant additive, in combination with a calcium hydroxybenzoate detergent additive providing Ca, expressed as atoms of Ca, in the range of 0.05 to 2 mass % in a gas engine lubricating oil composition that has (A) in excess of 50 mass % of an oil of lubricating viscosity including at least 90 mass % saturates and no more than 0.03 mass % sulfur; and 50 mass % or less of the composition of (B) the calcium hydroxybenzoate detergent additive, (C) the boron-containing dispersant additive, and (D) an aminic or phenolic antioxidant present in an amount of 0.1 to 3 mass % based on the mass of the composition, to improve the lead corrosion performance of the composition.

9. The use of boron at a concentration of less than 90 ppm by mass, provided by a boron-containing dispersant additive, in combination with a calcium hydroxybenzoate detergent additive providing Ca, expressed as atoms of Ca, in the range of 0.05 to 2 mass % in a gas engine lubricating oil composition that has (A) in excess of 50 mass % of an oil of lubricating viscosity including at least 90 mass % saturates and no more than 0.03 mass % sulfur; and 50 mass % or less of the composition of (B) the calcium hydroxybenzoate detergent additive, (C) the boron-containing dispersant additive, and (D) an aminic or phenolic antioxidant present in an amount of 0.1 to 3 mass % based on the mass of the composition, to improve the lead corrosion performance of the composition without adverse effect on its anti-wear performance.