

WHAT IS CLAIMED IS:

1. A marine diesel cylinder lubricating oil composition comprising:
 - (a) a major amount of an oil of lubricating viscosity, and
 - (b) a non-sulfur containing aromatic amine;
 wherein the marine diesel cylinder lubricating oil composition has a total base number (TBN) of about 5 to about 100 mg KOH/g; and further wherein the contribution of the non-sulfur containing aromatic amine to the TBN of the marine diesel cylinder lubricant oil composition is greater than about 30%.
2. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the non-sulfur containing aromatic amine is selected from a diphenylamine, a N-phenylnaphthylamine, a dinaphthylamine, or a phenylenediamine.
3. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the non-sulfur containing aromatic amine consists essentially of a diphenylamine.
4. The marine diesel cylinder lubricant oil composition according to claim 3, wherein the diphenylamine is selected from diphenylamine, N-methyldiphenylamine, 4-butyl diphenylamine, 4,4'-dibutyl diphenylamine, 4-hexyldiphenylamine, 4,4'-dihexyldiphenylamine, 4-heptyldiphenylamine, 4,4'-diheptyldiphenylamine, 4-octyldiphenylamine, 4,4'-dioctyldiphenylamine, 4-nonyldiphenylamine, 4,4'-dinonyldiphenylamine, or 4-tetradecyldiphenylamine, 4,4'-ditetradecyldiphenylamine, p,p'-di- α -methylbenzyl-diphenylamine; N-p-butylphenyl-N-p'-octylphenylamine, or bis(dialkylphenyl) amines.
5. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the non-sulfur containing aromatic amine is selected from alkylphenyl-1-naphthylamines, octylphenyl-1-naphthylamine, N-4-dodecylphenyl-1-naphthylamine; 1-naphthylamine; an aryl naphthylamine, phenyl-1-naphthylamine, phenyl-2-naphthylamine, N-hexylphenyl-2-naphthylamine, N-octylphenyl-2-naphthylamine, phenylenediamines, N,N'-diisopropyl-p-phenylenediamine, or N,N'-diphenyl-p-phenylenediamine.
6. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the contribution of the non-sulfur containing aromatic amine to TBN of the marine diesel cylinder lubricant oil composition is greater than about 32%, greater than about 34%, greater than about 36%, greater than about 38%, greater than about 40%, greater than about 42%, greater than about 44%, greater than about 46%, greater than about 48%, greater than about 50%, greater than about 52%, greater than about 54%, greater than about 56%, greater than

about 58%, greater than about 60%, greater than about 62%, greater than about 64%, greater than about 66%, greater than about 68%, greater than about 70%, greater than about 72%, greater than about 74%, greater than about 76%, greater than about 78%, greater than about 80%, greater than about 82%, greater than about 84%, greater than about 86%, greater than about 88%, or greater than about 90%.

7. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the contribution of the non-sulfur containing aromatic amine to TBN of the marine diesel cylinder lubricant oil composition is not greater than about 95%, not greater than about 90%, not greater than about 85%, not greater than about 80%, not greater than about 75%, not greater than about 70%, not greater than about 65%, not greater than about 60%, not greater than about 55%, or not greater than about 50%.

8. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the contribution of the non-sulfur containing aromatic amine to TBN of the marine diesel cylinder lubricant oil composition is between 30% and 95%, between 32% and 85%, between 34% and 75%, between 36% and 65%.

9. The marine diesel cylinder lubricant oil composition according to claim 1 further comprising a detergent selected from an alkyl-substituted hydroxyaromatic carboxylate, or an alkyl-substituted hydroxyaromatic compound.

10. The marine diesel cylinder lubricant oil composition according to claim 1, wherein the non-sulfur containing aromatic amine has a total base number between 100 mg KOH/g and 600 mg KOH/g, between 100 mg KOH/g and 300 mg KOH/g, or between 120 mg KOH/g and 250 mg KOH/g.

11. The marine diesel cylinder lubricant oil composition according to claim 1 having the TBN between 5 and 70 mg KOH/g or between 5 and 40 mg KOH/g.

12. A marine diesel cylinder lubricating oil composition comprising:

- (a) a major amount of an oil of lubricating viscosity, and
- (b) a non-sulfur containing aromatic amine;

wherein the non-sulfur containing aromatic amine is present in an amount sufficient to increase oxidation stability of the marine diesel cylinder lubricating oil composition as determined by ASTM D-6186 by at least 5% compared to a marine diesel cylinder lubricating oil composition substantially deficient of any non-sulfur containing aromatic amine.

13. The marine diesel cylinder lubricating oil composition according to claim 12, wherein the oxidation stability is increased by at least 7%, at least 9%, at least 11%, at least 13%, or at least 15%.

14. The marine diesel cylinder lubricating oil composition according to claim 12, wherein the marine diesel cylinder lubricating oil composition substantially deficient of any non-sulfur containing aromatic amine includes a non-sulfur containing aromatic amine in an amount of less than 0.5 wt%, less than 0.4 wt%, less than 0.3 wt%, or less than 0.2 wt%.

15. The marine diesel cylinder lubricant oil composition according to claim 12, wherein the non-sulfur containing aromatic amine is selected from alkylphenyl-1-naphthylamines, octylphenyl-1-naphthylamine, N-4-dodecylphenyl-1-naphthylamine; 1-naphthylamine; an aryl-naphthylamine, phenyl-1-naphthylamine, phenyl-2-naphthylamine, N-hexylphenyl-2-naphthylamine, N-octylphenyl-2-naphthylamine, phenylenediamines, N,N'-diisopropyl-p-phenylenediamine, or N,N'-diphenyl-p-phenylenediamine.