

CLAIMS:

What is claimed is:

1. A method comprising: blending a base stock and one or more additives to form a lubricating fluid, wherein: the base stock has a T10 distillation point of at least 482 °C, a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt or a kinematic viscosity at 100 °C of at least 14 cSt; and comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the lubricating fluid has an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D5704 of 30% or less, or an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D2893 of 6% or less.
2. The method of any of the above claims, wherein the lubricating fluid has an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D5704 of 20% or less.
3. The method of any of the above claims, wherein the lubricating fluid has an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D2893 of 3% or less.
4. The method of any of the above claims, wherein the lubricating fluid has a Brookfield viscosity measured according to ASTM D2983 of 70,000 mPa.s or less at -12 °C.
5. The method of any of the above claims, wherein the lubricating fluid has a Brookfield viscosity measured according to ASTM D2983 of from 30,000 mPa.s to 40,000 mPa.s at -12 °C.
6. The method of any of the above claims, wherein the lubricating fluid has a Brookfield viscosity measured according to ASTM D2983 of 150,000 mPa.s or less at -26 °C.
7. The method of any of the above claims, wherein the lubricating fluid has a pour point depressant additive content of 0.7 wt% or less.
8. The method of any of the above claims, wherein the lubricating fluid has a polyalphaolefin content of 10 wt% or less.
9. The method of any of the above claims, wherein the base stock has a viscosity index of from 80 to 120.
10. The method of any of the above claims, wherein the lubricating fluid is an automotive gear oil.

11. The method of any of the above claims, wherein the lubricating fluid is an engine oil.
12. The method of any of the above claims, wherein the lubricating fluid is an industrial gear oil.
13. A method comprising: blending a base stock and one or more additives to form a lubricating fluid, wherein: the base stock has a T10 distillation point of at least 482 °C, a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt or a kinematic viscosity at 100 °C of at least 14 cSt; and comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the lubricating fluid has a Brookfield viscosity measured according to ASTM D2983 of: 70,000 mPa.s or less at -12 °C, or 150,000 mPa.s or less at -26 °C; or the lubricating fluid has a MRV viscosity measured according to ASTM D4684 of 18,000 mPa.s or less at a test temperature from -20 °C to -8 °C.
14. A lubricating fluid comprising: a base stock and one or more additives, wherein: the base stock has a T10 distillation point of at least 482 °C, a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt or a kinematic viscosity at 100 °C of at least 14 cSt; and comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the lubricating fluid has an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D5704 of 30% or less, or an oxidation performance indicated by a kinematic viscosity at 100 °C (KV100) increase measured according to ASTM D2893 of 6% or less.
15. A lubricating fluid comprising: a base stock and one or more additives, wherein: the base stock has a T10 distillation point of at least 482 °C, a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt or a kinematic viscosity at 100 °C of at least 14 cSt; and comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the lubricating fluid has a Brookfield viscosity measured according to ASTM D2983 of: 70,000 mPa.s or less at -12 °C, or 150,000 mPa.s or less at -26 °C; or the lubricating fluid has a MRV viscosity measured according to ASTM D4684 of 18,000 mPa.s or less at a test temperature from -20 °C to -8 °C.
16. A method for producing a deposit resistant fluid comprising: combining a base stock and one or more additives to form a blended fluid configured to resist forming deposits in an oxidizing environment; wherein the base stock has a viscosity index of at least 80, and either a

kinematic viscosity at 40 °C of at least 320 cSt, or a kinematic viscosity at 100 °C of at least 14 cSt; and wherein the base stock comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms.

17. A method for maintaining or reducing deposit formation comprising: introducing a base stock to a blended fluid; wherein: the base stock has a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt, or a kinematic viscosity at 100 °C of at least 14 cSt; the base stock comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the addition of the base stock to the blended fluid maintains or increases the capability of the blended fluid to resist deposit formation in an oxidizing environment.

18. A method for mitigating deposit formation in an apparatus comprising: introducing a blended fluid to a metal member of the apparatus; wherein: the blended fluid comprises a base stock and one or more additives; the base stock has a viscosity index of at least 80, and either a kinematic viscosity at 40 °C of at least 320 cSt, or a kinematic viscosity at 100 °C of at least 14 cSt; the base stock comprises: greater than or equal to about 90 wt% saturates, less than or equal to about 10 wt% aromatics, and a sum of terminal/pendant propyl groups and terminal/pendant ethyl groups of at least 1.7 per 100 carbon atoms; and the blended fluid is configured to resist forming deposits in an oxidizing environment.