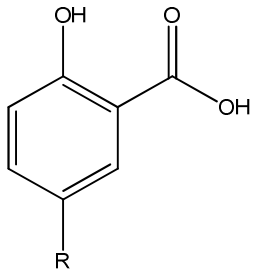
What is claimed:

1. A lubricating composition comprising:

(a) an oil of lubricating viscosity; and

(b) 0.01 wt % to 2 wt% of a detergent consisting of an alkylsalicylate represented by the structure



where R represents polyisobutylene having a number average molecular weight of 150 to 400 and wherein the detergent comprises up to 5 wt. %, or up to 3 wt. %, or up to 2.5 wt. % of the lubricating composition;

0.0001 wt% to 0.15 wt% of a corrosion inhibitor chosen from 2,5-bis(tert-dodecyldithio)-1.3.4-thiadiazole, tolytriazole, or mixtures thereof;

0.02 wt % to 3 wt % of antioxidant chosen from aminic or phenolic antioxidants, or mixtures thereof;

0.001 wt % to 1.5 wt % of a neutral or slightly overbased calcium sulfonate; and

0.001 wt % to 2 wt %, or 0.01 wt % to 1 wt % of an anti-wear agent chosen from zinc dialkyldithiophosphate, zinc dialkylphosphate, amine salt of a phosphorus acid ester, or mixtures thereof.

2. The lubricating composition of claim 1, wherein the detergent is a metal salt.

3. The lubricating composition of claim 2, wherein the metal in the salt comprises calcium.

4. The lubricating composition of claims 2 or 3, wherein the metal is overbased.

5. The lubricating composition of any of claims 1 to 4, wherein the detergent is free of C8 and higher unbranched alkyl chains.

6. The lubricating composition of claim 1, wherein the polyisobutylene has a number average molecular weight of 300 to 400.

7. The lubricating composition of any of claims 1 to 8, wherein the oil of lubricating viscosity comprises at least one of an API Group I, II, III, IV, and V base oil.

8. The lubricating composition of any of claims 1 to 7, wherein the oil of lubricating viscosity is at least 10 wt. % of the lubricating composition.

9. The lubricating composition of claim 8, wherein the oil of lubricating viscosity is at least 30 wt. % of the lubricating composition.

10. The lubricating composition of any of claims 1 to 9, wherein the oil of lubricating viscosity is up to 95 wt. % of the lubricating composition.

11. A method of lubricating a mechanical device comprising supplying to the device the lubricating composition of any of claims 1 to 10.

12. The method of claim 11, wherein the mechanical device comprises an engine or driveline device.

13. The method of claim 11 or 12, wherein the mechanical device comprises a heavy duty diesel or marine diesel engine.

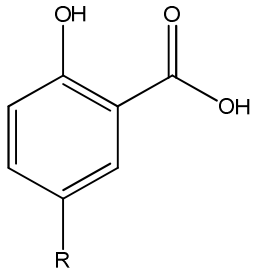
14. The method of claim 13, wherein the mechanical device is a hydraulic system, turbine system, or circulating oil system.

15. The method of claim 14, wherein the mechanical device is a transmission.

16. The use of the lubricating composition of any of claims 1 to 10 for lubricating a mechanical device.

17. A method of forming a lubricating composition comprising:

(i) forming an alkylsalicylate represented by the structure



where R represents polyisobutylene having a number average molecular weight of 150 to 400 and wherein the detergent comprises up to 5 wt. %, or up to 3 wt. %, or up to 2.5 wt. % of the lubricating composition ;

(ii) optionally, reacting the substrate with a metal base in the presence of carbon dioxide to form a metal salt; and

(iii) combining up to 5 wt% of the alkylsalicylate, 0.0001 wt% to 0.15 wt% of a corrosion inhibitor chosen from 2,5-bis(tert-dodecyldithio)-1.3.4-thiadiazole, tolytriazole, or mixtures thereof, 0.02 wt % to 3 wt % of antioxidant chosen from aminic or phenolic antioxidants, or mixtures thereof, 0.001 wt % to 1.5 wt % of a neutral or slightly overbased calcium sulfonate; and 0.001 wt % to 2 wt %, or 0.01 wt % to 1 wt % of an anti-wear agent chosen from zinc dialkyldithiophosphate, zinc dialkylphosphate, amine salt of a phosphorus acid ester, or mixtures thereof with an oil of lubricating viscosity.