What is claimed:

1. A lubricating composition comprising an oil of lubricating viscosity, an overbased metal-containing detergent, and an amino carboxylate compound of formula (I):

$$NR^1R^2\text{-}((CHR^3)_xNR^4)_n\text{-}(CHR^5)_2\text{-}COY,$$

(I)

where,

R^1 and R^2 are independently selected from $–(CHR^6)_2\text{-}COY´$, H, and C_1-C_3 alkyl and wherein at least one of R^1 and R^2 is $–(CHR^6)_2\text{-}COY´$; or wherein NR^1R^2 is an optionally substituted heterocyclic structure containing nitrogen and an additional hetero atom selected from oxygen and nitrogen;

Y and Y´ are independently selected from $–OR^7$, $–NHR^7$, and $–N(R^7)_2$;

each R^7 is independently selected from C_6-C_{12} alkyl and C_6-C_{12} alkenyl;

R^3, R^5 and R^6 are independently selected from H and C_1-C_4 alkyl;

R^4 is selected from H, C_1-C_4 alkyl, and $(CHR^3)_xNH_2$;

x is from 2 to 4; and

n is at least 1, except where NR^1R^2 is a heterocyclic structure, where n is at least 0.

2. The lubricating composition according to claim 1, wherein x is 2.

3. The lubricating composition according to claim 2, wherein R^3 is H.

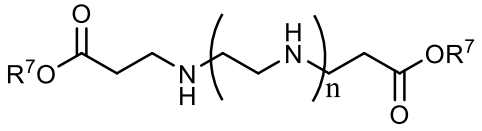
4. The lubricating composition according to claim 2, wherein n is at least 4.

5. The lubricating composition according to claim 1, wherein R^3, R^4, R^5 and R^6 are all H.

6. The lubricating composition according to claim 1, wherein at least one of Y and Y´ is $-OR^7$.

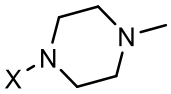
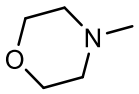
7. The lubricating composition according to claim 6, wherein each R^7 is selected from C_6-C_8 alkyl and C_6-C_8 alkenyl.

8. The lubricating composition according to claim 1, wherein the compound has a structure according to Structure (II):



(II)

9. The lubricating composition according to claim 8, wherein n is at least 3, or up to 6, and wherein R^7 is selected from C_6-C_8 alkyl and alkenyl groups.

10. The lubricating composition according to claim 1, wherein NR^1R^2 is a heterocyclic structure selected from  and , and wherein:

X is selected from H and $–(CH_2)_p$-W;

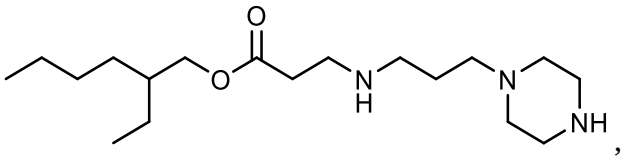
W is selected from $COOR^8$, NHR^8, and a heterocyclic structure as described for NR^1R^2 except that a terminal X is H or C_1-C_4 alkyl;

R^8 is selected from H, C_6-C_{30} alkyl, and C_6-C_{30} alkenyl, and

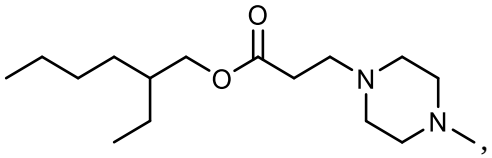
$–(CH_2)_p$-W´, where W´ is as for W, except that a terminal X is H or C_1-C_4 alkyl;

each p is from 2 to 4.

11. The lubricating composition according to claim 1, wherein the compound has a structure according to any one of:



(XI)



(XII)

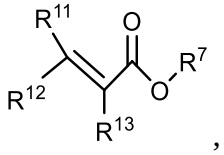
and mixtures thereof.

12. The lubricating composition according to claim 1, wherein the compound has a weight average molecular weight of up to 700, or up to 650.

13. The lubricating composition according to claim 1, wherein the amino-carboxylate compound is at least 1 wt. %, or at least 5 wt. %, or at least 10 wt. % of the lubricating composition.

14. A method of lubricating an engine, which comprises administering to the engine the lubricating composition according to claim 1.

15. A lubricating composition comprising an oil of lubricating viscosity and an amino carboxylate compound formed by Michael addition of an acylating agent and a polyamine, the acylating agent being represented by the general formula:



,

where R^{13} is hydrogen or methyl,

R^{11} and R^{12} are each independently selected from the group consisting of hydrogen, an alkyl group having from 1 to 12 carbon atoms, and a group having the formula —$COOR^{14}$ in which R^{14} is hydrogen or an alkyl group having from 1 to 12 or 1-6 carbon atoms;

the polyamine being represented by the general formula:

$NHR^4-((CHR^3)_xNR^4)_n-R^4$,

where x is from 2 to 4,

R^3 is selected from H and C_1-C_4 alkyl,

R^4 is selected from H, C_1-C_4 alkyl, and $(CHR^3)_xNH_2$, and

n is at least 1.