Claims:

1. An additive composition for breaking emulsion, and simultaneously inhibiting and controlling polymerization of a polymerizable material, wherein the composition comprises:

   (a) amino hexanoic acid selected from the group comprising: 6-amino hexanoic acid, an acid salt of 6-amino hexanoic acid, a sodium salt of 6-amino hexanoic acid, or a mixture thereof [compound-A]; and

   (b) borohydride selected from the group comprising: sodium borohydride, potassium borohydride, lithium borohydride, ammonium salt of borohydride, sodium triisopropoxy borohydride, or a mixture thereof [compound-B].

2. The additive composition as claimed in **claim 1**, wherein the polymerizable material is selected from a material having tendency to get polymerized on heating, on condensation, or on cracking.

3. The additive composition as claimed in **claim 1 or claim 2**, wherein the polymerizable material is a polymer formed on aldol condensation, preferably on aldol condensation of acetaldehyde.

4. The additive composition as claimed in any one of the preceding **claims 1 to 3**, wherein the ammonium salt of borohydride is selected from the group comprising: tetramethylammonium borohydride, and tetraethylammonium borohydride.

5. A method for breaking emulsion, and simultaneously inhibiting and controlling polymerization of a polymerizable material, wherein the method comprises a step of treating the polymerizable material with an additive composition, wherein the additive composition comprises:

   (a) amino hexanoic acid selected from the group comprising: 6-amino hexanoic acid, an acid salt of 6-amino hexanoic acid, a sodium salt of 6-amino hexanoic acid, or a mixture thereof [compound-A]; and

   (b) borohydride selected from the group comprising: sodium borohydride, potassium borohydride, lithium borohydride, ammonium salt of borohydride, sodium triisopropoxy borohydride, or a mixture thereof [compound-B];

6. The method as claimed in **claim 5**, wherein the amino hexanoic acid and the borohydride are preferably added in a one step process as a blend or a mixture in the polymerizabale material.

7. The method as claimed in **claim 5 or 6**, wherein the emulsion is formed between a hydrocarbon and caustic.

8. The method as claimed in any one of the preceding **claims 5 to 7**, wherein the polymerizable material is selected from a material having tendency to get polymerized on heating, on condensation, or on cracking.

9. The method as claimed in any one of the preceding **claims 5 to 8**, wherein the polymerizable material is a polymer formed on aldol condensation, preferably on aldol condensation of acetaldehyde.

10. Use of an additive composition for breaking the emulsion, and simultaneously for inhibiting and controlling polymerization of a polymerizable material, wherein the use comprises a step of adding the additive composition to the polymerizable material, wherein the additive composition comprises:

    (a) amino hexanoic acid selected from the group comprising: 6-amino hexanoic acid, an acid salt of 6-amino hexanoic acid, a sodium salt of 6-amino hexanoic acid, or a mixture thereof [compound-A]; and

    (b) borohydride selected from the group comprising: sodium borohydride, potassium borohydride, lithium borohydride, ammonium salt of borohydride, sodium triisopropoxy borohydride, or a mixture thereof [compound-B].

11. The use as claimed in **claim 10**, wherein the amino hexanoic acid and the borohydride are preferably added in a one step process as a blend or a mixture in the polymerizabale material.

12. The use as claimed in **claim 10 or 11**, wherein the emulsion is formed between a hydrocarbon and caustic.

13. The use as claimed in any one of the preceding **claims 10 to 12**, wherein the polymerizable material is selected from a material having tendency to get polymerized on heating, on condensation, or on cracking.

14. The use as claimed in any one of the preceding **claims 10 to 13**, wherein the polymerizable material is a polymer formed on aldol condensation, preferably on aldol condensation of acetaldehyde.

15. Use of an additive composition for preventing fouling, wherein the method comprises a step of adding the additive composition to the polymerizable material, wherein the additive composition comprises:

(a) amino hexanoic acid selected from the group comprising: 6-amino hexanoic acid, an acid salt of 6-amino hexanoic acid, a sodium salt of 6-amino hexanoic acid, or a mixture thereof [compound-A]; and

(b) borohydride selected from the group comprising: sodium borohydride, potassium borohydride, lithium borohydride, ammonium salt of borohydride, sodium triisopropoxy borohydride, or a mixture thereof [compound-B].

16. The use as claimed in **claim 15**, wherein the emulsion is formed between a hydrocarbon and caustic.

17. The use as claimed in **claim 15 or 16**, wherein the polymerizable material is selected from a material having tendency to get polymerized on heating, on condensation, or on cracking.

18. The use as claimed in any one of the preceding **claims 15 to 17**, wherein the polymerizable material is a polymer formed on aldol condensation, preferably on aldol condensation of acetaldehyde.

19. The use as claimed in any one of the preceding **claims 15 to 18**, wherein the fouling is formed by polymerization of a polymerizable material in a basic solution.

20. The use as claimed in **claim 19**, wherein the basic solution is in contact with a gaseous stream or a liquid hydrocarbon stream.

21. The use as claimed in **claim 20**, wherein the gaseous stream and the liquid hydrocarbon stream is an effluent from a hydrocarbon cracking operation.

22. The use as claimed in any one of the preceding **claims 15 to 21**, wherein the amino hexanoic acid and the borohydride are preferably added in a one step process as a blend or a mixture in the polymerizabale material.