C L A I M S

1. An electroplating composition for plating a chromium coating on a substrate, the composition comprising:

   (i) a source of hexavalent chromium;

   (ii) one or more than one betaine comprising a quaternary nitrogen and/or salts thereof; and

   (iii) one or more than one poly-organosiloxane;

   wherein the poly-organosiloxane is crosslinked, preferably is at least 2-dimenionally crosslinked, most preferably is 3-dimensionally crosslinked.

2. The electroplating composition according to claim 1, wherein said one or more than one betaine comprises a compound of formula (I)

$$(R^1)N^+(R^2R^3)–X–Y$$

(I),

   wherein independently

   R^1 denotes alkyl, alkyl ester, or alkyl amid, preferably alkyl;

   R^2 and R^3 denote a C1-C5 linear or branched alkyl, preferably a C1-C5 linear alkyl;

   X denotes a divalent moiety; and

   Y denotes a sulfonic acid group or a carboxylic acid group, preferably a sulfonic acid group.

3. The electroplating composition according to claim 2, wherein independently

   R^1 denotes a C16-C18 linear alkyl, preferably a C18 linear alkyl;

   R^2 and R^3 denote methyl or ethyl, preferably methyl;

   X denotes a C2-C4 alkylene moiety, preferably a C3 alkylene moiety; and

   Y denotes a sulfonic acid group.

4. The electroplating composition according to any one of the preceding claims, wherein the one or more than one poly-organosiloxane is amphiphilic.

5. The electroplating composition according to any one of the preceding claims, wherein the one or more than one poly-organosiloxane is surface-active.

6. The electroplating composition according to any one of the preceding claims, wherein said one or more than one poly-organosiloxane is emulsified in the electroplating composition.

7. The electroplating composition according to any one of the preceding claims, wherein in the electroplating composition said one or more than one poly-organosiloxane is homogeneously distributed.

8. The electroplating composition according to any one of the preceding claims, wherein the electroplating composition is substantially free of, preferably does not comprise, polydimethylsiloxane, most preferably is substantially free of, preferably does not comprise, a silicone oil.

9. The electroplating composition according to any one of the preceding claims having a surface tension of 50 mN/m or less, based on a measurement with a tensiometer, preferably of 45 mN/m or less, more preferably of 40 mN/m or less, even more preferably of 38 mN/m or less, yet even more preferably of 36 mN/m or less, most preferably of 35 mN/m or less.

10. The electroplating composition according to any one of the preceding claims substantially being free of, preferably not comprising, methane sulfonic acid and salts thereof, preferably substantially being free of, preferably not comprising, alkyl-mono-sulfonic acids and salts thereof, preferably substantially being free of, preferably not comprising, mono-sulfonic acids and salts thereof.

11. A method for electroplating a chromium coating on a substrate, the method comprising the steps:

(a) providing the substrate,

(b) providing an electroplating composition according to anyone of claims 1 to 10 in an electroplating compartment,

(c) contacting the substrate with said electroplating composition in the electroplating compartment and applying an electrical current such that the chromium coating is electroplated onto at least one surface of said substrate.

12. The method of claim 11, wherein in step (c) the electroplating compartment comprises at least one anode, preferably selected from the group consisting of lead-comprising anodes, precious metal-comprising anodes, and mixed metal oxide anodes, most preferably in step (c) the electroplating compartment comprises at least one lead-comprising anode.

13. The method of claim 11 or 12, wherein in step (c) in the electroplating compartment more than 50% of the surface of the electroplating composition is covered with a foam layer, preferably having a thickness ranging from 0.5 cm to 3 cm.

14. A use of one or more than one poly-organosiloxane in an electroplating composition for plating a chromium coating from hexavalent chromium, in combination with one or more than one betaine comprising a quaternary nitrogen and/or salts thereof, wherein the poly-organosiloxane is crosslinked, preferably is at least 2-dimenionally crosslinked, most preferably is 3-dimensionally crosslinked.