CLAIMS

We claim:

1. A photoresist cleaning solution consisting of:

a tetra-alkyl substituted ammonium hydroxide selected from the group consisting of tetramethylammonium hydroxide, tetraethylammonium hydroxide, dimethyldipropylammonium hydroxide, ethyltrimethylammonium hydroxide and a combination of at least two thereof;

an amine selected from the group consisting of monoethanolamine, 1,8-diazabicyclo[5.4.0]undec-7-ene, tetraethylenepentamine, and a combination of at least two thereof;

at least one of a C_4-C_{14} dibasic acid or an amine salt thereof, wherein said C_4-C_{14} dibasic acid is selected from the group consisting of dodecanedioic acid, sebacic acid, and undecanedioic acid;

optionally a sugar alcohol; and

water.

2. The solution of claim 1 further consisting of a sugar alcohol.

3. The solution of claim 2 wherein said sugar alcohol is selected from the group consisting of glycerin, sorbitol, and xylitol.

4. A photoresist cleaning solution consisting of:

a tetra-alkyl substituted ammonium hydroxide selected from the group consisting of tetramethylammonium hydroxide, tetraethylammonium hydroxide, dimethyldipropylammonium hydroxide, ethyltrimethylammonium hydroxide, and a combination of at least two thereof in an amount of from 1% by weight to 8% by weight of a total weight of the solution;

an amine selected from the group consisting of monoethanolamine, tetraethylenepentamine, 1,8- diazabicyclo[5.4.0]undec-7-ene, and a combination of at least two thereof in an amount of from 0.8% by weight to 10% by weight of the total weight of the solution;

at least one of a C_4-C_{14} dibasic acid or an amine salt thereof in an amount of from 0.1% by weight to 9% by weight of the total weight of the solution;

a sugar alcohol in an amount of from 0.1% by weight to 15% by weight of the total weight of the solution; and

the balance to 100 weight percent water.

5. The solution of claim 4 wherein said sugar alcohol is selected from the group consisting of glycerin, sorbitol, and xylitol.

6. The solution of claim 4 wherein said C_4-C_{14} dibasic acid is selected from the group consisting of dodecanedioic acid, sebacic acid, and undecanedioic acid.

7. A photoresist cleaning solution consisting of:

from 3% by weight to 5% by weight of a total weight of the solution of a tetra-alkyl substituted ammonium hydroxide selected from the group consisting of tetramethylammonium hydroxide, tetraethylammonium hydroxide, and a combination thereof;

from 2% by weight to 4% by weight of the total weight of the solution of an amine selected from the group consisting of monoethanolamine, tetraethylenepentamine, 1,8- diazabicyclo[5.4.0]undec-7-ene, and a combination of at least two thereof;

from 0.1% by weight to 2% by weight of the total weight of the solution of a dibasic acid or an amine salt thereof selected from the group consisting of dodecanedioic acid, sebacic acid, undecanedioic acid and a mixture thereof;

optionally 1% by weight to 3% by weight of the total weight of the solution of a sugar alcohol; and

the balance to 100 weight percent water.

8. The solution of claim 7 further consisting of 1% by weight to 3% by weight of the total solution of a sugar alcohol.

9. The solution of claim 8 wherein sugar alcohol is selected from the group consisting of glycerin, sorbitol, and xylitol.

10. The solution of claim 8 wherein sugar alcohol is glycerin.

11. A photoresist cleaning solution consisting of:

from 1% by weight to 5% by weight of a total weight of the solution of tetraethylammonium hydroxide;

from 2% by weight to 5% by weight of the total weight of the solution of monoethanolamine;

from 0.1% by weight to 2% by weight of the total weight of the solution of dodecanedioic acid, sebacic acid, or undecanedioic acid, a combination thereof or the amine salts thereof;

from 0.1% by weight to 2% by weight of the total weight of the solution of a sugar alcohol;

and the balance to 100 weight percent water.

12. The solution of claim 11 wherein said sugar alcohol is glycerin.

13. The solution of claim 11 wherein:

said tetraethylammonium hydroxide is present in an amount of from 2% by weight to 5% by weight of a total weight of the solution;

said monoethanolamine is present in an amount of from 2% by weight to 4% by weight of the total weight of the solution;

said sebacic acid or the amine salt thereof is present in an amount of from 0.1% by weight to 1% by weight of the total weight of the solution;

said sugar alcohol is glycerin present in an amount of from 0.1% by weight to 2% by weight of the total weight of the solution;

and the balance to 100 weight percent water.