CLAIMS

1. A polishing composition characterized by containing a nonionic active agent with a molecular weight of 1,000 or more and less than 100,000 and an HLB value of not less than 17, a basic compound, and water.

2. The polishing composition according to claim 1, wherein the molecular weight of the nonionic active agent is 3,000 or more and less than 50,000.

3. The polishing composition according to claim 1 or 2, wherein the HLB value of the nonionic active agent is not less than 18.

4. The polishing composition according to any one of claims 1 to 3, wherein the nonionic active agent is an oxyalkylene homopolymer or a copolymer of different oxyalkylenes.

5. The polishing composition according to claim 4, wherein the oxyalkylene homopolymer or the copolymer of different oxyalkylenes contains oxyethylene units in a proportion of not less than 85% by mass.

6. The polishing composition according to claim 5, wherein the oxyethylene units are contained in the oxyalkylene homopolymer or the copolymer of different oxyalkylenes in a proportion of not less than 90% by mass.

7. The polishing composition according to any one of claims 4 to 6, wherein the nonionic active agent is polyoxyethylene, polyethylene glycol, polyoxypropylene, polyoxybuthylene, polyoxyethylene-polyoxypropylene glycol, or polyoxyethylene-polyoxybuthylene glycol.

8. The polishing composition according to any one of claims 1 to 7, wherein the basic compound is ammonia, potassium hydroxide, sodium hydroxide, tetramethylammonium hydroxide, tetraethylammonium hydroxide, ammonium hydrogen carbonate, ammonium carbonate, potassium hydrogen carbonate, potassium carbonate, sodium hydrogen carbonate, sodium carbonate, methylamine, dimethylamine, trimethylamine, ethylamine, diethylamine, triethylamine, ethylenediamine, monoethanolamine, N-(β-aminoethyl) ethanolamine, hexamethylenediamine, diethylenetriamine, triethylenetetramine, anhydrous piperazine, piperazine hexahydrate, 1-(2-aminoethyl) piperazine, or N-methylpiperazine.

9. The polishing composition according to any one of claims 1 to 8, further containing silicon dioxide.

10. The polishing composition according to claim 9, wherein the silicon dioxide is colloidal silica.

11. The polishing composition according to any one of claims 1 to 11, further containing a water-soluble polymer.

12. The polishing composition according to claim 11, wherein the water-soluble polymer is a water-soluble cellulose derivative.

13. The polishing composition according to claim 12, wherein the water-soluble cellulose derivative has a weight-average molecular weight of not less than 100,000.

14. The polishing composition according to claim 11, wherein the water-soluble polymer is hydroxyethyl cellulose.

15. A method of polishing a surface of a semiconductor substrate using the polishing composition according to any one of claims 1 to 14.

CLAIMS

1. A polishing composition characterized by containing a nonionic active agent with a molecular weight of 1,000 or more and less than 100,000 and an HLB value of not less than 17, a basic compound, and water, wherein the nonionic active agent is contained in the polishing composition in an amount of 0.0001% by mass or more and less than 0.05% by mass.

2. The polishing composition according to claim 1, wherein the molecular weight of the nonionic active agent is 3,000 or more and less than 50,000.

3. The polishing composition according to claim 1 or 2, wherein the HLB value of the nonionic active agent is not less than 18.

4. The polishing composition according to any one of claims 1 to 3, wherein the nonionic active agent is an oxyalkylene homopolymer or a copolymer of different oxyalkylenes.

5. The polishing composition according to claim 4, wherein the oxyalkylene homopolymer or the copolymer of different oxyalkylenes contains oxyethylene units in a proportion of not less than 85% by mass.

6. The polishing composition according to claim 5, wherein the oxyethylene units are contained in the oxyalkylene homopolymer or the copolymer of different oxyalkylenes in a proportion of not less than 90% by mass.

7. The polishing composition according to any one of claims 4 to 6, wherein the nonionic active agent is polyoxyethylene, polyethylene glycol, polyoxypropylene, polyoxybutylene, polyoxyethylene-polyoxypropylene glycol, or polyoxyethylene-polyoxybutylene glycol.

8. The polishing composition according to any one of claims 1 to 7, wherein the basic compound is ammonia, potassium hydroxide, sodium hydroxide, tetramethylammonium hydroxide, tetraethylammonium hydroxide, ammonium hydrogen carbonate, ammonium carbonate, potassium hydrogen carbonate, potassium carbonate, sodium hydrogen carbonate, sodium carbonate, methylamine, dimethylamine, trimethylamine, ethylamine, diethylamine, triethylamine, ethylenediamine, monoethanolamine, N-(β-aminoethyl) ethanolamine, hexamethylenediamine, diethylenetriamine, triethylenetetramine, anhydrous piperazine, piperazine hexahydrate, 1-(2-aminoethyl) piperazine, or N-methylpiperazine.

9. The polishing composition according to any one of claims 1 to 8, further containing silicon dioxide.

10. The polishing composition according to claim 9, wherein the silicon dioxide is colloidal silica.

11. The polishing composition according to any one of claims 1 to 11, further containing a water-soluble polymer.

12. The polishing composition according to claim 11, wherein the water-soluble polymer is a water-soluble cellulose derivative.

13. The polishing composition according to claim 12, wherein the water-soluble cellulose derivative has a weight-average molecular weight of not less than 100,000.

14. The polishing composition according to claim 11, wherein the water-soluble polymer is hydroxyethyl cellulose.

15. A method of polishing a surface of a semiconductor substrate using the polishing composition according to any one of claims 1 to 14.