Claims

1. A method for producing a spherical silver powder, the method comprising the steps of:

preparing a water reaction system containing silver ions;

preparing an amino acid which has a carbon number of not less than 5 and which is neutral or basic; and

adding the amino acid to the water reaction system, and thereafter, adding a reducing agent to the water reaction system to deposit silver particles by reduction, the amount of the amino acid to be added being 0.05 to 6 % by weight with respect to silver in the water reaction system.

2. A method for producing a spherical silver powder as set forth in claim 1, wherein said amino acid is an alpha-amino acid.

3. A method for producing a spherical silver powder as set forth in claim 1, wherein said amino acid is at least one selected from the group consisting of proline, tyrosine, tryptophan, phenylalanine, arginine, histidine and anthranilic acid.

4. A method for producing a spherical silver powder as set forth in any one of claims 1 through 3, which further comprised a step of adding a surface treatment agent after the silver particles are deposited by reduction.

5. A spherical silver powder comprising:

spherical silver particles; and

an amino acid which has a carbon number of not less than 5 and which is neutral or basic, the amino acid being contained in each of the spherical silver particles,

wherein said spherical silver powder has an average particle diameter D_{50} of 0.2 to 5 μm based on a laser diffraction method, and

wherein said spherical silver powder has a BET specific surface area of 0.1 to 3 m^2/g.

6. A spherical silver powder as set forth in claim 5, wherein said amino acid is an alpha-amino acid.

7. A spherical silver powder as set forth in claim 5, wherein said amino acid is at least one selected from the group consisting of proline, tyrosine, tryptophan, phenylalanine, arginine, histidine and anthranilic acid.

8. A spherical silver powder as set forth in any one of claims 5 through 7, wherein the amount of said amino acid contained in each of said spherical silver particles is in the range of from 0.00001 % by weight to 1 % by weight.

9. A conductive paste comprising:

a spherical silver powder as set forth in any one of claims 5 through 8; and

an organic vehicle.