CLAIMS

1. A method for producing a silica microcapsule having a shell containing silica as a constituent component and a core containing one or more organic compounds inside the shell, the method comprising:

a step of subjecting an emulsified liquid obtained by emulsifying an aqueous phase component containing a cationic surfactant and an oil phase component containing one or more organic compounds and a silica source to a sol-gel reaction in the presence of one or more sulfur-containing ions selected from the group consisting of a sulfate ion, a sulfite ion, and a sulfonate ion to form the silica microcapsule,

wherein the amount of the sulfur-containing ion is 0.01 or more and 2 or less as a molar ratio [(sulfur-containing ions)/(counter ions of cationic groups)] of the total molar amount of the sulfur-containing ions to the molar amount of the counter ions of the cationic groups of the cationic surfactant.

2. The method for producing a silica microcapsule according to claim 1, wherein one or more compounds (A) selected from the group consisting of sulfuric acid, sulfurous acid, a sulfonic acid compound, and a salt thereof are added to the emulsified liquid, and then the emulsified liquid is subjected to a sol-gel reaction, in the step of forming a silica microcapsule.

3. The method for producing a silica microcapsule according to claim 2, wherein the compound (A) is one or more selected from the group consisting of sulfuric acid, sulfurous acid, a sulfonic acid compound, and an inorganic salt thereof.

4. The method for producing a silica microcapsule according to any of claims 1 to 3, wherein an amount of the silica source is 10% by mass or more and 100% by mass or less with respect to an amount of the organic compound.

5. The method for producing a silica microcapsule according to any of claims 1 to 4, wherein the cationic surfactant is an alkyltrimethylammonium salt having an alkyl group having 10 or more and 22 or less carbon atoms.

6. The method for producing a silica microcapsule according to any of claims 1 to 5, wherein a median diameter D_{50} of emulsified droplets of the emulsified liquid is 0.1 μm or more and 10 μm or less.

7. The method for producing a silica microcapsule according to any of claims 1 to 6, wherein an initial pH of the sol-gel reaction is 3.0 or more and 4.5 or less.

8. The method for producing a silica microcapsule according to any of claims 1 to 7, wherein the organic compound is one or more selected from the group consisting of a fragrance material, a fragrance precursor, a moisturizer, an antioxidant, an antibacterial agent, a fertilizer, a surface modifier, and a solvent.

9. The method for producing a silica microcapsule according to any of claims 1 to 8, wherein the silica source comprises a tetraalkoxysilane as a main component.

10. A water dispersion comprising a silica microcapsule having a shell containing silica as a constituent component and a core containing one or more organic compounds inside the shell,

wherein a total content of a sulfate ion, a sulfite ion, and a sulfonate ion is 10 ppm or more and 70 ppm or less.