WHAT IS CLAIMED IS:

1. An epoxy resin composition for semiconductor encapsulation, comprising the following components (A) to (D):

(A) an epoxy resin;

(B) a phenol resin;

(C) an inorganic filler; and

(D) a silicone compound containing an alkoxy group directly bonded to silicon atom in an amount of 10 to 45 wt% based on the entire silicone compound and having a specific gravity of 1.10 to 1.30.

2. The epoxy resin composition for semiconductor encapsulation according to claim 1, wherein the silicone compound as the component (D) is contained in an amount of 0.5 to 5.0 wt% based on the entire epoxy resin composition.

3. The epoxy resin composition for semiconductor encapsulation according to claim 1 or 2, wherein the inorganic filler as the component (C) is contained in an amount of 70 to 92 wt% based on the entire epoxy resin composition.

4. The epoxy resin composition for semiconductor encapsulation according to any one of claims 1 to 3, wherein the alkoxy group in the silicone compound as the component (D) contains at least a methoxy group.

5. The epoxy resin composition for semiconductor encapsulation according to any one of claims 1 to 4, wherein the silicone compound as the component (D) has an organic substituent, and the organic substituent contains a phenyl group.

6. A semiconductor device obtained by resin-encapsulating a semiconductor element with the epoxy resin composition for semiconductor encapsulation according to any one of claims 1 to 5.

7. The semiconductor device according to claim 6, which is a single-sided resin encapsulation-type package.

CLAIMS

What is claimed is:

1. An epoxy resin composition for semiconductor encapsulation, comprising the following components (A) to (D):

(A) an epoxy resin;

(B) a phenol resin;

(C) an inorganic filler; and

(D) a silicone compound containing an alkoxy group directly bonded to silicon atom in an amount of 10 to 45 wt % based on the entire silicone compound and having a specific gravity of 1.10 to 1.30,

wherein the silicone compound as the component (D) is contained in an amount of 0.5 to 5.0 wt % based on the entire epoxy resin composition.

2. The epoxy resin composition for semiconductor encapsulation according to claim 1, wherein the inorganic filler as the component (C) is contained in an amount of 70 to 92 wt % based on the entire epoxy resin composition.

3. The epoxy resin composition for semiconductor encapsulation according to claim 1, wherein the alkoxy group in the silicone compound as the component (D) contains at least a methoxy group.

4. The epoxy resin composition for semiconductor encapsulation according to claim 1, wherein the silicone compound as the component (D) has an organic substituent, and the organic substituent contains a phenyl group.

5. A semiconductor device obtained by resin-encapsulating a semiconductor element with the epoxy resin composition for semiconductor encapsulation according to claim 1.

6. The semiconductor device according to claim 5, which is a single-sided resin encapsulation-type package.