Claims

[Claim 1]

A printed wiring board including a surface-treated glass cloth, the surface-treated glass cloth comprising a surface treatment layer on a surface, wherein:

a glass constituting the glass cloth has a composition containing 52.0 to 60.0 mass% of SiO_2, 15.0 to 26.0 mass% of B_2O_3, 9.0 to 18.0 mass% of Al_2O_3, 1.0 to 8.0 mass% of MgO, 1.0 to 10.0 mass% of CaO, 0 to 6.0 mass% of SrO, 0 to 6.0 mass% of TiO_2, and 0.1 to 3.0 mass% in total of F_2 and Cl_2, based on a total amount of the glass;

the glass cloth has a surface coverage in a range of 75.0 to 100.0% and a thickness in a range of 8 to 95 μm; ~~and~~

the surface treatment layer contains a silane coupling agent having a methacrylic group and contains no surfactant,~~.~~ and

the surface coverage is calculated from the following formula;

$$100 \times (25000\ (\mu m) \times \text{width of warp yarn } (\mu m) \times \text{weaving density of warp yarns (yarns/25 mm)} + 25000\ (\mu m) \times \text{width of weft yarn } (\mu m) \times \text{weaving density of weft yarns (yarns/25 mm)} - \text{width of warp yarn } (\mu m) \times \text{weaving density of warp yarns (yarns/25 mm)} \times \text{width of weft yarn } (\mu m) \times \text{weaving density of weft yarns (yarns/25 mm)})/(25000\ (\mu m) \times 25000\ (\mu m))$$

[Claim 2]

The printed wiring board including the surface-treated glass cloth according to claim 1, wherein a silica microparticle adheres to a surface of a glass filament constituting the glass cloth.

[Claim 3]

The printed wiring board including the surface-treated glass cloth according to claim 1 or 2, wherein the glass cloth has a surface coverage in a range of 85.5 to 100.0%.

[Claim 4]

The printed wiring board including the surface-treated glass cloth according to claim 3, wherein the glass cloth has a thickness in a range of 8 to 60 μm.

[Claim 5]

The printed wiring board including the surface-treated glass cloth according to claim 3, wherein the glass cloth has a thickness in a range of 8 to 40 μm.

[Claim 6]

The printed wiring board including the surface-treated glass cloth according to any one of claims 1 to 5, wherein the glass constituting the glass cloth has a composition containing 52.0 to 60.0 mass% of SiO_2, 15.0 mass% or more and less than 20.0 mass% of B_2O_3, 9.0 to 18.0 mass% of Al_2O_3, 1.0 to 6.0 mass% of MgO, 1.0 to 9.0 mass% of CaO, 0 mass% or more and less than 0.5 mass% of SrO, 1.0 to 6.0 mass% of TiO_2, and 0.1 to 2.5 mass% in total of F_2 and Cl_2, based on the total amount of the glass.

[Claim 7]

The printed wiring board including the surface-treated glass cloth according to any one of claims 1 to 5, wherein the glass constituting the glass cloth has a composition containing 52.0 to 60.0 mass% of SiO_2, 20.0 mass% or more and less than 26.0 mass% of B_2O_3, 9.0 to 18.0 mass% of Al_2O_3, 1.0 to 6.0 mass% of MgO, 1.0 to 9.0 mass% of CaO, 0.5 mass% or more and less than 6.0 mass% of SrO, 0 to 6.0 mass% of TiO_2, and 0.1 to 2.5 mass% in total of F_2 and Cl_2, based on the total amount of the glass.

~~[Claim 8]~~

~~A prepreg comprising the surface-treated glass cloth according to any one of claims 1 to 7.~~

~~[Claim 9]~~

~~A printed wiring board comprising the surface-treated glass cloth according to any one of claims 1 to 7.~~