CLAIMS

1. An aluminum substrate for a magnetic recording medium, comprising: an aluminum substrate; an anodic oxide film having a thickness of 7 μm or more and 25 μm or less formed on the aluminum substrate; and a silica-converted film on the anodic oxide film, the silica-converted film being prepared by coating the anodic oxide film with a polysilazane solution containing methylhydropolysilazane in an amount at which a leveling effect is revealed,

wherein the silica-converted film is a silica layer having a thickness of 0.2 μm or more, and

the silica-converted film includes a silica skeleton in which a part of a three-dimensional network of Si-O-Si is terminated with a methyl group.

2. The aluminum substrate for a magnetic recording medium according to claim 1, wherein the polysilazane solution containing methylhydropolysilazane is a mixture of methylhydropolysilazane and an inorganic polysilazane.

3. The aluminum substrate for a magnetic recording medium according to claim 2, wherein a blending ratio of the methylhydropolysilazane to the inorganic polysilazane in the mixture is in a range of from 8/2 to 2/8 in a weight ratio.

4. A method for producing an aluminum substrate for a magnetic recording medium, the method comprising:

forming an anodic oxide film having a thickness of 7 μm or more and 25 μm or less on an aluminum substrate; and

coating the anodic oxide film with a polysilazane solution containing methylhydropolysilazane in an amount at which a leveling effect is revealed and then undergoing silica conversion by heating, thereby forming a silica-converted film on the anodic oxide film,

wherein the polysilazane solution containing methylhydropolysilazane is a mixture of methylhydropolysilazane and an inorganic polysilazane, and

the silica-converted film is a silica layer having a thickness of 0.2 μm or more.

5. The method for producing an aluminum substrate for a magnetic recording medium according to claim 4, wherein the anodic oxide film is formed with an anodic oxidation treatment solution containing at least oxalic acid.

6. The method for producing an aluminum substrate for a magnetic recording medium according to claim 4, wherein a blending ratio of the methylhydropolysilazane to the inorganic polysilazane in the mixture is in a range of from 8/2 to 2/8 in a weight ratio.