The intermediate layer 22 preferably has a silicon content of 35 atomic% or more, more preferably 40 atomic% or more, further preferably 45 atomic% or more. The intermediate layer 22 is preferably formed of a material consisting of silicon, nitrogen, and oxygen. In this case, it is recognized that the material consisting of silicon, nitrogen, and oxygen encompasses a material containing a noble gas. In the intermediate layer 22, the total content of silicon, nitrogen, and oxygen is preferably 95 atomic% or more, more preferably 96 atomic% or more, further preferably 98 atomic% or more. In the intermediate layer 22, the ratio of the nitrogen content [atomic%] divided by the oxygen content [atomic%] is preferably 1.0 or more, more preferably 1.1, or more further preferably 1.2 1 or more. In the intermediate layer 22, the ratio of the nitrogen content [atomic%] divided by the oxygen content [atomic%] is preferably less than 5.0, more preferably 4.8 or less, further preferably 4.5 or less, yet preferably 4.0 or less.

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The ratio of the film thickness of the intermediate layer 22 with respect to the overall film thickness of the phase shift film 2 is preferably 0.15 or more, more preferably 0.20 or more, further preferably 0.30 or more. If the above-mentioned ratio of the film thickness of the intermediate layer 22 is smaller than 0.15, the ratio of a region of the phase shift film 2, where optical characteristics hardly change when the phase shift film 2 is subjected to repeated irradiation with the ArF exposure light, becomes small with respect to the entire region of the phase shift film 2 so that the variation in transmittance and phase difference of the phase shift film 2 is difficult to be inhibited. In addition, in case where the phase shift film 2 is patterned by dry etching using the fluorine-based gas and in case where a black defect is repaired by EB defect repair, the ratio of a region of the intermediate layer 22, where a side etching amount is intermediate between those of the lower layer 21 and the upper layer 23, becomes small with respect to the entire region of the phase shift film 2 so