

ABSTRACT

A reflective mask blank for EUV lithography, comprising: a substrate; and a multilayer reflective film that reflects EUV light, and an absorption film that absorbs EUV light, which are stacked over the substrate in the stated order, wherein the absorption film comprises a metallic element X as a main component, the absorption film comprises a first crystal structure as a crystal structure of the metallic element X stable at normal pressure (1 atm) at 25°C in a bulk state, and a second crystal structure different from the first crystal structure, and the peak area ratio of the second crystal structure is 9% or more.