

ABSTRACT

There are provided a reflective mask blank in which a fine absorption film pattern is formed even when a high-absorbent material is used as an absorption film of an EUV mask, whereby the shadowing effect can be reduced and electron beam repair etching can be performed and a reflective mask blank for producing the same. A reflective mask blank (10) according to this embodiment includes: a substrate (1); a multi-layer reflective film (2) reflecting an EUV light having a multi-layer structure formed on the substrate (1); a capping layer (3) protecting the multi-layer reflective film (2) formed on the multi-layer reflective film (2); and an absorption film (4) absorbing the EUV light formed on the capping layer (3), in which the absorption film (4) contains 50% by atom or more of elements constituting at least one of tin oxide (SnO) and indium oxide (InO) and contains a material easy to be etched by a fluorine-based gas or a chlorine-based gas.

Figure 1