

[Document Type] Abstract

[Title of the Invention] Zn-Al-Mg-BASED PLATED STEEL SHEET

This Zn-Al-Mg-based plated steel sheet has a steel sheet, an alloy layer which is formed on a surface of the steel sheet and contains Fe and Si, and a plated layer which is formed on a surface of the alloy layer opposite to the steel sheet, in which an average composition of the plated layer and the alloy layer includes, in mass%, Al: 45.0 to 65.0%, Si: 0.50 to 5.00%, Mg: 1.00 to 10.00%, and a balance of Zn, Fe, and impurities, the plated layer contains 0.1 to 20.0% of a Mg-Si phase in terms of volume fraction, in a case where a 1 μm range from a surface of the plated layer in a thickness direction of the plated layer is defined as a surface layer area of the plated layer, an average equivalent circle diameter of the Mg-Si phase in the surface layer area in a direction in which the plated layer is overserved in a plane view is 0.1 to 15.0 μm , and an integrated value of a Si content from the surface of the plated layer to thickness center of the plated layer is 0.55 times or more of an integrated value of the Si content from the surface of the plated layer to an interface.

[No suitable figure]