

ABSTRACT

The plated steel sheet comprises: a steel sheet; and a plated layer arranged on a surface of the steel sheet, wherein the plated layer comprises, as a chemical composition, Al: 10.0% to 25.0%, Mg: 3.0% to 10.0%, Fe: 0.01% to 2.00%, Si: more than 0.00% and 2.00% or less, and a remainder comprising Zn and impurities, and when the plated layer is subjected to grazing incidence X-ray diffraction measurement under conditions where Cu-K α ray is used, an acceleration voltage as an X-ray output is 50 kV, and an X-ray incident angle against a surface of the plated layer is 1°, an X-ray diffraction intensity ratio between a (300) plane of a Mg₂₁Zn₂₅ phase and a (002) plane of an η -Zn phase ($I(\text{Mg}_{21}\text{Zn}_{25})/I(\eta\text{-Zn})$) is more than 0.3.

[No suitable figure]