

ABSTRACT

PRECOATED STEEL SHEET EXCELLENT IN SCRATCH RESISTANCE AND MOISTURE ABSORPTION RESISTANCE OF COATING AND EXCELLENT IN END FACE RED RUST CORROSION RESISTANCE

A chromate-free type precoated steel sheet able to exhibit the effect of inhibiting red rust at the end face while avoiding wetting of the coating in a high humidity environment and also provided with sufficient resistance to white rust, having an effect of inhibiting red rust at the end face, and provided with sufficient scratch resistance is provided. The chromate-free type precoated steel sheet comprising a galvanized steel sheet having a chromate-free type chemical conversion treatment layer on both surfaces, and pluralities of coatings formed thereon comprising a topmost layer coating and a lower layer coating adjacent thereto, the topmost layer coating of one surface satisfying the conditions of (1) a contact angle of a surface of the coating with water is 65 to 75°, (2) a film thickness of the coating is 0.5 to 5 μm , (3) the coating includes a first pigment, a content of the pigment being 15 to 70 mass% with respect to the mass of the dried coating, (4) in the first pigment, a total of the pigment with an average primary particle size of 1 μm or more is 5 mass% or more with respect to the mass of the dried coating, and (5) the coating contains granular wax of an average particle size of 1 to 8 μm in a content with respect to the mass of the dried coating of 1 to 10 mass%, at least part of the granular wax particles present in a state partially protruding from the coating surface, and the lower layer coating contains one type or two or more types of a second pigment of a deliquescent antirust pigment.

[No suitable figure]