

SURFACE TREATED METAL SHEET**ABSTRACT**

The surface-treated metal sheet according to the present invention is a surface-treated metal sheet with a resin film prepared with an aqueous resin solution, characterized in that the aqueous resin solution contains an aqueous carboxyl group-containing polyurethane resin solution and an aqueous ethylene-unsaturated carboxylic acid copolymer dispersion in an amount of 5 to 45 parts by mass as nonvolatile resin components, and silica particles having an average particle size of 4 to 20 nm in an amount of 55 to 95 parts by mass, in the total amount of 100 parts by mass, and additionally a silane-coupling agent in an amount of 5 to 25 parts by mass with respect to the total amount of 100 parts by mass, a compounding ratio of the nonvolatile resin component in the aqueous polyurethane resin solution (PU) to the nonvolatile resin component in the aqueous ethylene-unsaturated carboxylic acid copolymer dispersion (EC) (PU:EC) being 9:1 to 2:1. The surface-treated metal sheet according to the present invention is superior in corrosion resistance, coating property (film adhesiveness), abrasion resistance, alkaline degreasing resistance, and conductivity.

No suitable figure for publication