

Abstract

Aqueous Solution and Process for Phosphatizing Metallic Surfaces

There is described an aqueous, phosphate-containing solution for producing phosphate coatings on metallic surfaces of iron, steel, zinc, zinc alloys, aluminium or aluminium alloys, which contains 0.3 to 5 g Zn^{2+} /l and 0.1 to 3 g nitroguanidine/l, where the acid value is 0.03 to 0.3 and the weight ratio of $\text{Zn} : \text{P}_2\text{O}_5 = 1 : 5$ to $1 : 30$. Furthermore, there is described a process of phosphatizing, where the metallic surfaces are cleaned, subsequently treated with the aqueous phosphatizing solution for a period of 5 seconds to 10 minutes at a temperature of 15 to 70°C, and finally rinsed with water.