

【Document title】 Abstract

A purpose of the present invention is to provide a surface treated steel sheet for a battery container having an excellent anti-alkaline characteristic and a performance for maintaining a discharging level for a long time, a battery container and a product method thereof. In the present invention, after forming a nickel-bismuth alloy layer on a steel sheet, the steel sheet is thermally treated at 300 °C to 650 °C in an inactive gas or a deoxidizing gas for 240 to 600 min so that an iron-nickel diffused layer and nickel-bismuth diffused layer are formed at each boundary surface. A battery is produced by utilizing a battery container made of a steel sheet on which one or more than layers selected from a group of an iron-nickel diffused layer, a nickel layer, a nickel-bismuth diffused layer, an iron-nickel-bismuth alloy layer is formed on the steel sheet.