

Hardenable Al-Mg-Si-based aluminum alloy

Abstract of the disclosure

A hardenable Al-Mg-Si-based aluminum alloy is shown. In order to provide a recycling-friendly, storage-stable and particularly thermosetting aluminum alloy, it is proposed that this aluminum alloy should contain from 0.6 to 1% by weight of magnesium (Mg), from 0.2 to 0.7% by weight of silicon (Si), from 0.16 to 0.7% by weight of iron (Fe), from 0.05 to 0.4% by weight of copper (Cu), a maximum of 0.15% by weight of manganese (Mn), a maximum of 0.35% by weight of chromium (Cr), a maximum of 0.2% by weight of zirconium (Zr), a maximum of 0.25% by weight of zinc (Zn), a maximum of 0.15% by weight of titanium (Ti), 0.005 to 0.075% by weight of tin (Sn) and/or indium (In), and the remainder aluminum and production-related unavoidable impurities, wherein the ratio of the weight percentages of Si/Fe is less than 2.5 and the content of Si is determined according to the equation $\text{wt.\% Si} = A + [0.3 * (\text{wt.\% Fe})]$, with the parameter A being in the range of 0.17 to 0.4% by weight.