

Title (en)
THIXOTROPIC ALUMINIUM-SILICON-COPPER ALLOY SUITABLE FOR SEMI-SOLID SHAPING

Title (de)
THIXOTROPE ALUMINIUM-SILIZIUM-KUPFER LEGIERUNG ZUR FORMGEBUNG IN HALBFESTEN ZUSTAND

Title (fr)
ALLIAGE THIXOTROPE ALUMINIUM-SILICIUM-CUIVRE POUR MISE EN FORME A L'ETAT SEMI-SOLIDE

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Application
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Abstract (en)
[origin: FR2746414A1] An aluminium alloy suitable for thixotropic shaping, comprising 5-7.2 wt % of Si, 1-5 wt % of Cu, < 1 wt % of Mg, < 3 wt % of Zn, < 1.5 wt % of Fe, and < 1 wt % each and < 3 wt % in all of other elements, with the proviso that % Si < 7.5 - % Cu/3, and including no non-remelted polyhedral silicon crystals when it is reheated in a semi-solid state to give a liquid fraction level of 35-55 %, is disclosed. The resulting parts produced by thixotropic shaping by means of said alloy have high mechanical strength and good elongation properties.

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