

Title (en)
Aluminium base alloy for hollow bodies for pressure containers.

Title (de)
Legierung auf Aluminiumbasis für Hohlkörper für Druckbehälter.

Title (fr)
Alliage à base d'A1 pour corps creux sous pression.

Publication
EP 0257167 A1 19880302 (FR)

Application
EP 86420225 A 19860909

Priority
FR 8610930 A 19860724

Abstract (en)
[origin: ES2001145A6] The invention relates to hollow bodies for gas under pressure manufactured from an aluminum alloy containing Zn, Cu and Mg as principal alloying elements and intended in particular for the production of metal bottles for pressurized gas. The hollow bodies are manufactured from an alloy consisting essentially of (in % by weight): -6.25 ≤ Zn ≤ 8.0 Mn ≤ 0.20 -1.2 ≤ Mg ≤ 1.95 Zr ≤ 0.05 -1.7 ≤ Cu ≤ 2.8 Ti ≤ 0.05 -0.15 ≤ Cr ≤ 0.28 Others each ≤ 0.05 -Fe ≤ 0.20 Others total ≤ 0.15 -Si + Fe ≤ 0.40 Balance Al. - The alloy in state T73 complies with the very severe technical requirements in respect of strength and ductility which are imposed in relation to use for hollow bodies under pressure.

Abstract (fr)
L'invention concerne un alliage d'Al pour corps creux sous pression contenant du Zn, du Cu et du Mg comme éléments d'alliage principaux et destiné, en particulier, à la fabrication de bouteilles métalliques pour gaz sous pression. La composition de cet alliage est la suivante (en poids %) : 6,25 ≤ Zn ≤ 8,0 ≤ Mg ≤ 2,2 ≤ Cu ≤ 2,8 ≤ Cr ≤ 0,28 Fe ≤ 0,20 Fe + Si ≤ 0,40 Mn ≤ 0,20 Zr ≤ 0,05 Ti ≤ 0,05 Autres chacun ≤ 0,05 Autres total ≤ 0,15 reste Al Cet alliage, à l'état T73, remplit les exigences techniques très sévères de résistance et de ductilité, imposées pour ce genre d'application.

IPC 1-7
C22C 21/10; **F17C 1/14**

IPC 8 full level
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Citation (search report)

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