

**A shaped metal fixed-bed catalyst, a process for its
preparation and its use**

Abstract

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The invention relates to a shaped metal fixed-bed catalyst which contains at least one catalyst alloy consisting of a catalyst metal and an extractable alloying component, wherein the catalyst is activated in an outer layer with a
10 thickness of 0.1 to 2.0 mm starting from the surface by complete or partial extraction of the extractable alloying component. The catalyst may also contain promoters. The catalyst is characterised as compared with known catalysts in that it consists exclusively of the catalyst alloy(s)
15 and has a total pore volume of 0.1 to 0.6 ml/g. The catalyst is used for hydrogenation, dehydrogenation and hydrogenolysis reactions.