

Catalyst for dehydrogenating amino alcohols to aminocarboxylic acids or ethylene glycol (derivatives) to oxycarboxylic acids, process for its preparation and application thereof

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Abstract:

Catalyst for dehydrogenating amino alcohols to aminocarboxylic acids or ethylene glycol (derivatives) to oxycarboxylic acids, said catalyst containing zirconium, copper and possibly an additional metal, whereby the cited metals are precipitated as hydroxides, washed, dried, calcined, and reduced, preparable in that zirconium hydroxide is precipitated from an aqueous zirconium salt solution using a base until a pH of 4 to 10 is attained, the aqueous solution of a copper salt and possibly of an additional salt is added to the zirconium hydroxide suspension, and by adding further base copper hydroxide and possibly the hydroxide of the metal contained in the additional salt is precipitated until a pH of 8 to 14 is attained, the suspension obtained is filtered, washed, dried, calcined in air at 450 to 600°C for 2 to 4 hours and finally reduced at 200 to 250°C in a hydrogen stream for 2 to 4 hours.