## *FINE CHEMICALS*

### 5543379

### HYDROGENATION CATALYST, AND A METHOD FOR ITS PREPARATION AND USE, IN PARTICULAR FOR HYDROGENATION AND/OR HYDROGENOLYSIS OF CARBOHYDRATES AND POLYHYDRIC ALCOHOLS

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A metallic catalyst composition on an inert support, suitable in particular for hydrogenolysis reactions of higher polyhydric alcohols, characterized in that it comprises the following relative to 100 parts of the catalyst: a) 0.5 to 5 weight % ruthenium; b) 1 to 10 weight % of a metal selected from the group consisting of palladium, platinum and rhodium; and c) 0.5 to 2.5 weight % copper, in which the copper content is lower than the content of the metal b). The catalyst is used in particular for producing lower polyhydric alcohols such as ethanediol, propylene glycol, butanediol and glycerol, by means of hydrogenolysis reaction of higher polyhydric alcohols.

### 5543536

### MONODENTATE PHOSPHITE AND NICKEL CATALYST COMPOSITION FOR MONOOLEFIN HYDROCYANATION

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Catalyst compositions comprising zero-valent nickel and a mondentate phosphite ligand are provided, with a process for the hydrocyanation of monoolefins using these compositions in the presence of a Lewis acid promoter.

### 5545753

### PROCESS FOR PREPARING ANILINES, CATALYSTS USED THEREFOR AND PROCESS FOR PREPARING SAME

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The process for preparing anilines by reaction of phenols with an amination agent in accordance with the present invention is disclosed, which process is characterized by carrying out the reaction of phenols with an amination agent in the presence of a low alkali and weakly acidic alumina catalyst having the alkali oxide content of less than 0.5% by weight, said alumina catalyst being obtained by firing an alumina catalyst containing in a dry state more than 80% by weight of alumina and less than 20% by weight of silica at a temperature of 600°-900°C, followed by acid treatment. According to the present invention, there are obtained such excellent effects that even when the reaction is carried out at a temperature lower than those employed in the case of conventionally well-known catalysts, the desired anilines can be prepared in high yields and high selectivity and, moreover, a high catalyst activity can be maintained over a long period of time. The alumina catalyst used in the present invention is characterized by having the alkali metal oxide content of less than 0.5% by weight and pKa of from -3.0 to +6.8 as measured by Hammett's indicator, and containing in a dry state more than 80% by weight of alumina and less than 20% by weight of silica, and this catalyst is prepared by firing an alumina catalyst containing in a dry state more than 80% by weight of alumina and less than 20% by weight of silica at a temperature of 600°-900°C, followed by acid