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(54) Title: PRODUCTION OF UNSATURATED ACIDS OR ESTERS THEREOF AND CATALYSTS THEREFOR

(57) Abstract

The production of ethylenically unsaturated acids or esters by the catalytic reaction of an alkanoic acid or ester, especially methyl propionate, with formaldehyde, and a catalyst therefor wherein the catalyst comprises a porous high surface area silica containing 1–10 % by weight of an alkali metal, especially cesium, (expressed as metal) and having compounds of at least one modifier element selected from boron, magnesium, aluminium, zirconium and hafnium dispersed in the pores of said silica in such amount that the catalyst contains a total of 0.25 to 2 gram atoms of primary modifier element per 100 moles of silica.



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