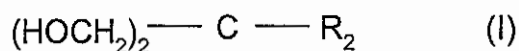


Process for preparing polyalcohols from formaldehyde with a low formic acid content

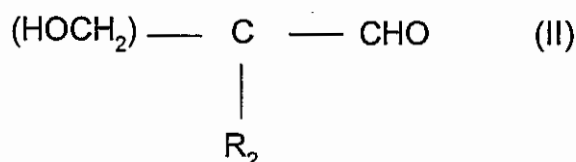
Abstract

- 5 The invention relates to a process for preparing polymethylol compounds of the formula (I)



- 10 where the radicals R are each, independently of one another, a further methylol group or an alkyl group having from 1 to 22 carbon atoms or an aryl or aralkyl group having from 6 to 22 carbon atoms, by condensation of aldehydes having from 2 to 24 carbon atoms with formaldehyde in an aldol reaction using tertiary amines as catalyst to form alkanals of the formula (II)

15



- where the radicals R each independently have one of the abovementioned meanings, and subsequent hydrogenation of the latter. The particular inventive feature of this
20 process is that the aldol reaction is carried out using an aqueous formaldehyde solution having a formic acid content of < 150 ppm and preferably < 100 ppm.

- In this way of carrying out the process, the formation of by-products can advantageously be prevented in a targeted manner and the yield of the desired
25 polymethylol compound can thereby be increased.