

Title (en)
METHOD FOR PRODUCING TRIMETHYLOL ALKANES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON TRIMETHYLOLALKANEN

Title (fr)
PROCEDE DE PREPARATION DE TRIMETHYLOLALCANES

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Application
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Abstract (en)
[origin: WO0151438A1] The invention relates to a two-step method for producing trimethylol alkanes of the general formula (I), (HOCH₂)₃-C-R, wherein R represents methylol, C₁-C₁₂ alkyl, C₆-C₁₀ aryl or C₇-C₂₂ aralkyl, and simultaneously producing calcium formiate on the basis of an aldehyde of the formula (II), RCH₂CHO, wherein R has the meaning indicated above. In a first step, an aldehyde of the formula (II) and a formaldehyde are reacted in the presence of a base to give a 2,2-dimethylol alkanal of formula (III), wherein R has the meaning indicated above. In a second step, the compound of formula (III) is reacted with formaldehyde in the presence of calcium hydroxide. The invention provides a method for obtaining trimethylol alkanes of the general formula (I) with a high purity and in high yields.

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