

Process for producing hydroxyalkyl (meth)acrylate esters by oxidative cleavage of
methacrolein acetals

Abstract

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The present invention relates to a process for producing hydroxyalkyl (meth)acrylate esters, in particular hydroxyethyl methacrylate (HEMA), comprising, in a first reaction step, the reaction of (meth)acrolein with at least one polyhydric alcohol, in particular ethylene glycol, in the presence of a first catalyst C1, wherein a first reaction product comprising a cyclic acetal is obtained, and, in a second reaction step, the reaction of
10 the first reaction product with oxygen in the presence of a second catalyst C2, wherein a second reaction product comprising at least one hydroxyalkyl (meth)acrylate ester is obtained, wherein, after the first reaction step, water and optionally further components, in particular (meth)acrolein and/or the polyhydric alcohol, e.g. ethylene
15 glycol, are at least partially removed from the first reaction product.

Fig. 1