

**IMPROVED PROCESS FOR PREPARING ACETALDEHYDE FROM
ETHYLENE AND OXYGEN**

ABSTRACT

The invention relates to a process for oxidizing a reaction gas in the presence of a catalyst solution, in which process

a) the reaction gas is oxidized in a reactor in the presence of the catalyst solution, a reaction mixture being formed which comprises droplets of the catalyst solution, and which

b) is passed into a first separator and in this droplets of the catalyst solution are removed from the reaction mixture, and in which process

c) the remaining reaction mixture is passed from the first separator into a scrubbing apparatus and in this the oxidation product is removed from the reaction mixture,

which comprises

d) passing the reaction mixture from the first separator through a second separator which is downstream of the first separator and upstream of the scrubbing apparatus and, in the second separator, removing residual catalyst solution from the reaction mixture.

Figure 1