

ABSTRACT

The present invention provides a process for the production of glyoxals which comprises effecting the oxidative dehydrogenation of a glycol at a temperature of 400 to 700°C in the presence of a silver-based catalyst composed of silver and at least one element selected from the group consisting of gold, platinum, rhodium and palladium, and phosphorus or a phosphorus compound, as well as such catalysts. These process and catalysts make it possible to produce high-quality glyoxals in high yield and with industrial advantages while minimizing the contents of unreacted raw material and reaction intermediates such as glycolaldehyde and acetol.