

ABSTRACT

Provided is an industrially advantageous method for producing a dialdehyde having a production ratio of linear dialdehydes to branched dialdehydes of 80/20 to 90/10, with an amount of rhodium to be used that is lower than that in the related art. Specifically, provided is a method for producing a dialdehyde, including reacting a linear olefinic compound having each of an ethylenic double bond and an aldehyde group on each end of the molecule with carbon monoxide and hydrogen, in the presence of a rhodium catalyst comprised of a bisphosphite represented by General Formula (I) and a rhodium compound, in which the reaction pressure of a mixed gas formed of carbon monoxide and hydrogen is decreased as the reaction proceeds, wherein R represents a hydrogen atom, an alkyl group having 1 to 4 carbon atoms, or an alkoxy group having 1 to 4 carbon atoms, and W represents an alkylene group having 1 to 20 carbon atoms, a cycloalkylene group having 5 to 18 carbon atoms, or an alkylene-arylene group having 7 to 11 carbon atoms, and a rhodium compound.