

Abstract

The invention relates to a synthesis reactor and a method of production of vinyl acetate in which gaseous ethylene and acetic acid as well as oxygen or gases containing oxygen react catalytically, with the synthesis reactor being a wall reactor in which the catalytic synthesis takes place in a number of reaction chambers that are smaller than 2000 μm , preferably smaller than 1000 μm in at least one dimension in relation to the free flow cross-section, the indirectly cooled walls of which are coated with a palladium-gold catalyst.