

ABSTRACTPROCESS FOR THE HYDROXYCARBONYLATION OF BUTADIENE

The present invention relates to the hydroxycarbonylation of butadiene and/or of its derivatives, into pentenoic acids, by reaction of carbon monoxide and water.

More precisely, it consists of a process for the hydroxycarbonylation of butadiene and of its derivatives by carbon monoxide and water, at a pressure greater than atmospheric pressure and in the presence of a palladium catalyst which is soluble in the reaction medium, characterized in that:

- the process is performed in the presence of crotyl chloride, in an amount of at least two mol per mole of palladium,
- the palladium is in the form of a crotyl pi-complex,
- the water present in the reaction medium represents an amount less than or equal to 20% by weight relative to the weight of the reaction mixture.

Pentenoic acids lead, via hydroxycarbonylation, to adipic acid, which is one of the basic compounds in the preparation of nylon 6.6 polymers.