

## عنوان مقاله:

Improving the Industrial Production of 6- Amino Penicillanic Acid

## محل انتشار:

پنجمین کنگره بین المللی مهندسی شیمی (سال: 1386)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

The antibiotic penicillin G is the most common raw material for semisynthetic  $\beta$ -lactam antibiotics. Key intermediate for  $\beta$ -lactam antibiotics is 6-amino penicillanic acid (6-APA), the  $\beta$ -lactam nucleus, which has a worldwide consumption in pharmaceutical industry. [1] The hydrolysis of linear amide bond in penicillin molecules to produce the  $\beta$ -lactam nucleus, 6-APA and the corresponding carboxylic acid. PG acylase is one of the most widely used enzymes at industrial scale. The enzyme PG acylase catalyses the deacylation of penicillin G or Penicillin V under appropriate pH conditions. [2] For separating the reaction solution and retaining the biocatalyst inside the reactor. The stirred vessel is equipped with filters having a pore size of 50-80  $\mu$ m. The invention relates to an improved process for converting a release penicillin G to 6-aminopenicillanic acid. The process employs a suspension of penicillin acylase enzyme, which after separation the biocatalyst, product precipitate in presence of organic solvents.

## کلمات کلیدی:

Aminopenicillanic acid, penicillin acylase, phenylacetic acid, purification, solvent-6

## لینک ثابت مقاله در پایگاه سیویلیکا:

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