

酶法生产阿莫西林，氨苄西林，头孢氨苄与头孢羟氨苄工艺技术

Technologies for Carbohydrate Pharmaceuticals

1. 阿莫西林 Amoxicillin (CAS 26787-78-0):

Bio-Enzymatic Reaction:



Yield: > 90 % (guaranteed; semi-continuous process with recycling)

> 95 % achieved; semi-continuous process with recycling

Explanation: Semi-continuous bio-enzymatic process with recycling and in situ product recovery. Process and reactor different from Ampicillin-Production

2. 氨苄西林 Ampicillin (CAS 69-53-4):

Bio-Enzymatic Reaction:



Yield: > 90% (guaranteed; semi-continuous process with recycling)

> 95% achieved; semi-continuous process with recycling

Explanation: Semi-continuous bio-enzymatic process with recycling and in situ product recovery. Process and reactor different from Amoxicillin-Production

3. 头孢氨苄 Cephalexin (CAS 15686-71-2):

Bio-Enzymatic Reaction:

7-ADCA + D-Phenylglycine-Amide (or Ester) à Cephalexin

Yield: >85% (guaranteed; semi-continuous process with recycling)

>90% achieved; semi-continuous process with recycling

4. 头孢羟氨苄 Cephadroxil (CAS 50370-12-2) :

Bio-Enzymatic Reaction:

7-ADCA + D-p-OH-Phenylglycine-Amide (or Ester) à Cephadroxil

Yield: > 85% (guaranteed; semi-continuous process with recycling)

90% achieved; semi-continuous process with recycling

5. 侧链与前体 Side-Chains ,Precursors:

6-APA (1-year-contract; minimum 250 tons-per-year)

D-p-OH-Phenylglycine base (1-year-contract; minimum 250 tons-per-year)

D-p-OH-Phenylglycine-amide (1-year-contract; minimum 250 tons-per-year)

D-p-OH-Phenylglycine-ester (1-year-contract; minimum 250 tons-per-year)