

Product Information



Penicillin G Acylase

FERMASE | PS™
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- Introduction** : Biocatalytic synthesis of beta lactam and cephalosporin intermediates is an established technology based on immobilized Penicillin G Acylase (PGA).
As a pioneer, FBL has developed next generation PGA enzyme for the enzymatic synthesis of beta lactam antibiotics (e.g. Amoxicillin trihydrate)
- Product Type** : **Penicillin G Acylase** is a novel enzyme catalyst based on covalent immobilisation on polymer supplied as wet insoluble spherical beads stored in 0.1M phosphate buffer with added preservative.
- Description** : Creamish to brown regularly shaped beads with defined particle size distribution. The color may vary from batch to batch and the color intensity is not an indication of the product quality.
- Particle Size** : 250-500 µm > 95.0%.
- Penicillin G Hydrolysis Activity** : NLT 95 Units per gram wet weight & NLT 200 Units per gram dry weight.
- Units definition** : Amount of enzyme catalyzing the formation of one micromole of 6-Aminopenicillanic acid at 37° C, pH 8.0 at 2 % (w/v) Penicillin G potassium salt initial concentration, in the milieu of 50 mM of Sodium Phosphate buffer, within the range of zero order kinetics.
- Dry weight** : 44-48 %.
- Application** : Enzyme mediated synthesis of betalactam antibiotics e.g. Amoxicillin trihydrate
- Process characteristics**
Reaction pH : 6.2-6.5
Reaction temperature: 20-25°C
Reaction media : Water
Hazard chemistry : Nil
- Advantages** :
♦ Very high specific activity
♦ Very high selectivity and precision
♦ High operational stability
- Storage & Product Stability** : Cool and dry conditions are recommended for storage. The recommended temperature for storing is between 2 to 10°C. When stored under these conditions, the product will maintain its declared activity for at least 12 months.
- Safety** : **Penicillin G Acylase** is very safe to handle as it does not generate any aerosols. However, avoid raising dust. Avoid contact with skin and eyes. Take up the spilled dust by mechanical means. Avoid forming aerosols, wash contaminated clothing & ensure sufficient ventilation.

MANUFACTURED BY :
FERMENTA BIOTECH LTD.