

Enzymes

Immobilized cellulases for hydrolysis of pretreated sugarcane bagasse

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Raw material

Sugarcane bagasse

Process

Hydrolysis with immobilized cellulases

End product

Glucose

Biocatalyst consisting of immobilized cellulases for hydrolysis of pretreated sugarcane bagasse by organosolv process. The combination with easily hydrolyzable cellulose allows obtaining highly pure glucose and the reuse of enzymes. The immobilized enzyme represents most of the solid recovered at the end of the hydrolysis because almost all the solid substrate added to the reactor is solubilized.

Applications

- + Production of cellulosic ethanol and bioproducts.
- + Production of glucose with a high degree of purity.

Advantages

- + Possibility to reuse the enzymes for new hydrolysis reactions.
- + Reduction of the costs of the process and of the end product.
- + Better use of sugarcane bagasse.
- + Optimization of processes inserted in the biorefinery context.

Stage ► TRL/MRL 3 - Lab scale

Take this technology to another stage



Research with us for other potential uses



Make this technology the basis of your incubated company

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