

ABSTRACT

PROCESS FOR PRODUCING ϵ -CAPROLACTAM

A high purity ϵ -caprolactam is prepared by crystallizing an ϵ -caprolactam from a hydrocarbon solution containing a crude ϵ -caprolactam, and allowing the crystallized ϵ -caprolactam in contact with hydrogen in the presence of a hydrogenation catalyst. This process can effectively remove impurities from a crude ϵ -caprolactam, which is obtained by subjecting cyclohexanone oxime to the Beckmann rearrangement, and provide a high purity ϵ -caprolactam.