

ABSTRACT OF THE DISCLOSURE

PROCESS FOR PRODUCING CYCLOHEXANONE OXIME

A process for producing for cyclohexanone oxime that is superior in thermal stability wherein cyclohexanone is subjected to ammoximation reaction is provided. The process includes (1) a reaction step wherein the ammoximation reaction of cyclohexanone with hydrogen peroxide and ammonia is carried out in the presence of a titanasilicate catalyst to give a reaction solution, (2) a first distillation step wherein residual ammonia is distilled off from the reaction solution to obtain a cyclohexanone oxime/water-mixed solution, (3) an extraction step wherein cyclohexanone oxime is extracted with an organic solvent from the cyclohexanone oxime/water-mixed solution, (4) a washing step wherein an extract containing cyclohexanone oxime is washed with water, (5) a second distillation step wherein the organic solvent is distilled off from the extract containing cyclohexanone oxime which has been washed and crude cyclohexanone oxime is obtained as a bottom product, and (6) a third distillation step wherein residual cyclohexanone is distilled off from the crude cyclohexanone oxime to obtain pure cyclohexanone oxime.