

ABSTRACT

A resilient polyurethane foam produced by using a polyether polyol produced by reacting alkylene oxides with a polyhydroxy compound having at least 2 hydroxyl groups as an initiator in the presence of the catalyst for alkylene oxide ring-opening polymerization of the present invention, is excellent in foam physical properties, vibration characteristics and molding properties. The crushing property of a sheet cushion having a large size and a complicated shape will significantly be improved while maintaining comfortableness of the sheet cushion to sit on. Accordingly, a resilient polyurethane foam useful as a sheet cushion for vehicles, particularly for automobiles, can be provided.

The present invention provides a catalyst for alkylene oxide ring-opening polymerization, which comprises a double metal cyanide complex obtained by having mono-tert-butyl ether of mono(or di or tri)ethylene glycol as an organic ligand coordinated to a reaction product obtained by reacting a metal halide with an alkali metal cyanometalate, in an aqueous medium.

The present invention further provides a method for producing a resilient polyurethane foam, which comprises subjecting alkylene oxides including an alkylene oxide having a carbon number of at least 3, to ring-opening polymerization with a polyhydroxy compound having from 2

to 8 hydroxyl groups as an initiator in the presence of
said catalyst for alkylene oxide ring-opening
polymerization, and then reacting a polyether polyol
having from 2 to 8 hydroxyl groups, a hydroxyl number of
5 from 5 to 38 mgKOH/g and an oxyethylene group content of
from 5 to 30 wt% and obtained by ring-opening
polymerization of ethylene oxide in the presence of an
alkali catalyst, with an isocyanate group-containing low
molecular weight compound in the presence of a foaming
10 agent.