

POLYURETHANE FOAMS BASED ON POLYETHERCARBONATE POLYOLS

ABSTRACT

The present invention relates to a method for producing polyurethane foams by reacting an isocyanate component with an isocyanate-reactive component comprising at least one polyethercarbonate polyol, the reaction taking place in the presence of a component K selected from one or more compounds from the group consisting of K1 esters of mono- or polybasic carboxylic acids whose (first) dissociation has a pKa of 0.5 to 4.0, K2 mono-, di- and polysulfonates of mono- and polyfunctional alcohols, and K3 one or more compounds from the group consisting of K 3.1 esters of phosphoric acid, phosphonic acid, phosphorous acid, phosphinic acid, phosphonous acid and phosphinous acid, these esters each containing no P-OH group, K3.2 oligomeric alkyl phosphates of the general formula (II), where a is an integer from 1 to 10, b is an integer from 1 to 10, R1, R2, R3 and R4 are alkyl groups having at least one carbon, and R1, R2, R3 and R4 are alike or, independently of one another, different, and R5 is a linear alkylene group having at least two carbons or is a branched alkylene group having at least three carbons, and K3.3 comprises oligomeric alkyl phosphates of the general formula (III), where a is an integer from 1 to 10, b is an integer from 1 to 10, R1, R4 and R5 are linear alkylene groups having at least two carbons or are branched alkylene groups having at least three carbons, and R1, R4 and R5 are alike or, independently of one another, different, and R2 and R3 are alkyl groups having at least one carbon, and R2 and R3 are alike or, independently of one another, different. The invention also relates to polyurethane foams produced by the method of the invention and to the use thereof.