

ABSTRACT

The present invention allows the production of a polymerizable hyperbranched polyester by introducing polymerizable unsaturated double bonds into the molecular terminals of a hyperbranched polyester polyol (A), which is obtained by condensation polymerization a polyhydroxy monocarboxylic acid in which there are at least two hydroxyl groups, the carbon atom adjacent to the carboxy group is saturated carbon atom, and the hydrogen atoms on said carbon atom are all substituted, by reacting the hyperbranched polyester polyol (A) and an alkyl ester of a carboxylic acid having a polymerizable unsaturated double bond (B) by a transesterification in the presence of at least one type of transesterification catalyst (C) selected from the group consisting of a dialkyl tin oxide and a stanoxane, without causing side reactions such as nucleophilic addition reactions of terminal hydroxyl groups to polymerizable unsaturated double bonds of the hyperbranched polyester polyol (A), or thermal polymerization of the polymerizable unsaturated double bonds. The polymerizable hyperbranched polyester can be produced at high efficiency using a transesterification that uses as an alkyl ester of a carboxylic acid having a polymerizable unsaturated double bond (B), which is easily obtained as an industrial raw material, and without altering the original backbone structure

of the molecular chains of the hyperbranched polyester polyol
(A) by hydrolysis and so forth.