

DOUBLE-METAL CYANIDE CATALYSTS WHICH CAN BE USED TO
PREPARE POLYOLS AND THE PROCESSES RELATED THERETO

ABSTRACT OF THE DISCLOSURE

The present invention is directed to double metal cyanide catalysts ("DMC") which can be used to prepare polyols. DMC catalysts of the present invention are prepared by combining i) at least one metal salt; ii) at least one metal cyanide salt; iii) at least one organic complexing ligand; iv) at least one alkaline metal salt; and, optionally, v) at least one functionalized polymer. The present invention is also directed to a process for preparing a polyol in the presence of a DMC catalyst of or prepared according to the present invention.

Surprisingly, DMC catalysts of the present invention, which are preferably prepared with at least one alkaline metal halide, have acceptable activity and can be used to catalyze oxyalkylation reactions. Additionally, DMC catalysts produced by the process of the present invention can be used to prepare polyols which have reduced levels of high molecular weight tail.