

Abstract**POLYETHER CARBONATE POLYOLS MADE VIA DOUBLE METAL
CYANIDE (DMC) CATALYSIS**

The present invention relates to a polyether carbonate polyol made by copolymerizing a starter molecule with carbon dioxide, at a pressure ranging from about 10 psia to about 2,000 psia, and an alkylene oxide, at a temperature ranging from about 50°C to about 190°C and in the presence of from about 0.001 wt.% to about 0.2 wt.% of a substantially non-crystalline double metal cyanide (DMC) catalyst, wherein the polyol has an incorporated carbon dioxide content of from about 1 wt.% to about 40 wt.%, wherein the ratio of cyclic carbonate by-product to total carbonate is less than about 0.3 and wherein the weight percentages are based on the weight of the polyol. The inventive polyether carbonate polyols may find use in producing polyurethane foams, elastomers, coatings, sealants and adhesives with improved properties.

No Figure