

Title (en)
METHOD TO INCREASE THE LEVEL OF -g(a)-GLYCOL IN LIQUID EPOXY RESIN

Title (de)
VERFAHREN ZUR ERHÖHUNG DES ALPHA-GLYKOLGRUPPENGESHALTS IN FLÜSSIGEN EPOXYDHARZEN

Title (fr)
PROCEDE POUR AUGMENTER LE NIVEAU DE -g(a)-GLYCOL DANS DES RESINES EPOXY LIQUIDES

Publication
EP 0724605 A1 19960807 (EN)

Application
EP 94910685 A 19940214

Priority
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• US 13866193 A 19931018

Abstract (en)
[origin: WO9511266A1] The performance of epoxy resins in several end-uses is enhanced by the presence of small quantities of hydrolyzed resin terminated by alpha -glycol groups. The invention is a process in which a mixture that contains liquid epoxy resin and water is reacted at elevated temperatures in order to hydrolyze epoxy groups into alpha -glycol groups, characterized in that: (1) the reaction temperature is between 130 DEG C and 200 DEG C; (2) the reaction mixture contains between 0.5 and 10 parts water per 100 parts resin by weight; and (3) the mixture contains 0 to 1 weight percent organic solvents and 0 to 100 ppm each of: organic acids, organic diacids, phosphonium compounds, and alkali or alkaline earth metals and their salts. The process raises the level of alpha -glycol groups in the resin, but uses no solvents or catalysts, so that it is easy to clean up the resulting resin.

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