Title (en)

PHENOLIC HYDROXYL-CONTAINING COMPOSITIONS AND EPOXY RESINS PREPARED THEREFROM AND SOLID COMPOSITIONS PREPARED THEREFROM.

Title (de)

ZUSAMMENSETZUNGEN EINE PHENOLISCHE HYDROXYLGRUPPE ENTHALTEND SOWIE DARAUS HERGESTELLTE EPOXYHARZE SOWIE DARAUS HERGESTELLTE FESTE ZUSAMMENSETZUNGEN.

Title (fr)

COMPOSITIONS CONTENANT UN HYDROXYLE PHENOLIQUE ET RESINES EPOXYDES PREPAREES A PARTIR DE CES COMPOSITIONS ET COMPOSITIONS SOLIDES PREPAREES A PARTIR DE CELLES-CI.

Publication

**EP 0148817 A4 19851121 (EN)**

Application

**EP 83902389 A 19830627**

Priority

US 8300980 W 19830627

Abstract (en)

[origin: WO8500173A1] This invention is directed to phenolic hydroxyl-containing compositions and to epoxy resins prepared therefrom, the compositions having more than one phenolic hydroxyl group and more than one aromatic ring per molecule, which is substantially free of ether groups, and which composition results from an acid catalyzed reaction of (A) at least one aromatic compound containing at least one aromatic hydroxyl group and from one to two aromatic rings and at least one ortho or para position relative to a hydroxyl group available for ring alkylation; with (B) at least one unsaturated hydrocarbon. The invention is characterized in that component (B) is selected from (1) monounsaturated or diunsaturated hydrocarbons having from 4 to 6 carbon atoms or mixtures thereof; (2) unsaturated hydrocarbons containing an average of from 6 to 55 carbon atoms per molecule and containing not more than 94 weight percent dicyclopentadiene, (3) oligomers and/or cooligomers of hydrocarbon dienes, which dienes have from 4 to 18 carbon atoms, and which dienes contain at least 6 percent by weight of diene other than dicyclopentadiene; and (4) mixtures thereof. This invention is also directed to an epoxy resin composition resulting from the dehydrohalogenation of the reaction product of an epoxy alkyl halide with the composition having more than one phenolic hydroxyl group and more than one aromatic ring per molecule as described above. The epoxy resins of this invention have improved mold shrink properties and improved aqueous solvent resistance.

IPC 1-7

C08G 59/00; C08G 65/08; C08G 65/14

IPC 8 full level

**C07C 39/00** (2006.01); **C07C 37/14** (2006.01); **C07C 39/21** (2006.01); **C07C 39/225** (2006.01); **C07C 39/23** (2006.01); **C08G 59/00** (2006.01); **C08G 59/06** (2006.01); **C08G 59/58** (2006.01); **C08G 59/62** (2006.01); **C08G 59/68** (2006.01); **C08G 61/00** (2006.01); **C08G 61/02** (2006.01); **C08G 61/04** (2006.01); **C08G 61/06** (2006.01); **C08G 61/08** (2006.01); **C08G 65/08** (2006.01); **C08G 65/14** (2006.01); **C08L 63/00** (2006.01)

CPC (source: EP)

**C07C 39/21** (2013.01); **C07C 39/225** (2013.01); **C07C 39/23** (2013.01); **C08G 59/063** (2013.01); **C08G 59/58** (2013.01); **C08G 59/688** (2013.01); **C08G 61/02** (2013.01)

Citation (search report)

- [X] GB 858028 A 19610104 - MONSANTO CHEMICALS
- [Y] DE 1495710 A1 19690814 - HOECHST AG
- [X] US 3639490 A 19720201 - BROWN RENE P, et al
- [X] GB 1076031 A 19670719 - CARLESS CAPEL & LEONARD LTD, et al
- See references of WO 8500173A1

Cited by

US10961208B1; EP3842466A1

Designated contracting state (EPC)

BE CH DE FR GB LI NL

DOCDB simple family (publication)

**WO 8500173 A1 19850117**; BR 8307740 A 19850604; DK 172761 B1 19990628; DK 77285 A 19850220; DK 77285 D0 19850220; EP 0148817 A1 19850724; EP 0148817 A4 19851121; JP S60501711 A 19851011; NO 162968 B 19891204; NO 162968 C 19900314; NO 850776 L 19850226

DOCDB simple family (application)

**US 8300980 W 19830627**; BR 8307740 A 19830627; DK 77285 A 19850220; EP 83902389 A 19830627; JP 50242783 A 19830627; NO 850776 A 19850226