

Title (en)

Liquid carbodiimide-uretonimine-modified polyphenylene polyisocyanates and polyurethane foams made therefrom.

Title (de)

Flüssige Carbodiimid-Uretonimin-modifizierte Polyphenylen-Polyisocyanate sowie die daraus hergestellten Polyurethan-Schaumstoffe.

Title (fr)

Polyphénylène-polyisocyanates liquides modifiés par des groupes carbodiimide-urétonimine et mousses de polyuréthane préparées à partir de ceux-ci.

Publication

**EP 0308710 A1 19890329 (DE)**

Application

**EP 88114416 A 19880903**

Priority

US 9568087 A 19870914

Abstract (en)

A process for the preparation of liquid polymethylene polyphenylene polyisocyanate blends containing carbodiimide-uretonimine isocyanate linkages, containing a high two-ring methylene bis(phenylisocyanate) content, and light colored polyurethane foams made therefrom. The process is comprised of reacting polymethylene polyphenylene polyisocyanate with a catalytically effective amount of a carbodiimide-uretonimine promoting compound at a temperature sufficient to promote the formation of carbodiimide-uretonimine linkages and an isocyanate content of about 25 percent and the desired viscosity is reached, and then reacting that product to deactivate the carbodiimide-uretonimine catalyst, and finally blending two ring methylene bis(phenylisocyanate) with the product to produce a mixture having a two ring isocyanate content of about 60 percent of the total ring content and a viscosity comparable to standard polymeric MDI. Urethane foams made from this material are lighter in color than those formed from standard polymeric MDI.

IPC 1-7

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IPC 8 full level

**C08G 18/79** (2006.01)

CPC (source: EP US)

**C08G 18/797** (2013.01 - EP US)

Citation (search report)

- [X] EP 0189156 A2 19860730 - BASF CORP [US]
- [A] EP 0193787 A2 19860910 - BASF CORP [US]
- [A] DE 2742275 A1 19780323 - ICI LTD
- [AD] US 4284730 A 19810818 - NARAYAN THIRUMURTI, et al
- [A] GB 2114976 A 19830901 - BASF WYANDOTTE CORP

Cited by

EP1078944A1; EP0440960A1; US5100998A; WO2008009669A1; WO2011120750A1; US9012627B2

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