

Title (en)

Process for the preparation of dialkoxyphosphono alkyl carbamates.

Title (de)

Verfahren zur Herstellung von Dialkoxyphosphonoalkylcarbamaten.

Title (fr)

Procédé de préparation de dialcoxyphosphonoalcoylcarbamates.

Publication

EP 0000531 A1 19790207 (DE)

Application

EP 78100416 A 19780718

Priority

DE 2734454 A 19770730

Abstract (en)

1. Process for the preparation of dialkoxyphosphonoalkylcarbamates of the formula see diagramm : EP0000531,P5,F5 in which R1 and R2 are identical or different alkyl radicals having from 1 to 4 carbon atoms, R3 is hydrogen or the CH₃ group, R4 is hydrogen, (C1-4) alkyl or the group see diagramm : EP0000531,P5,F7 in which A is (C2-4) alkylene, n is 1 or 2, by reacting dialkylphosphites of the formula see diagramm : EP0000531,P6,F1 in which R1 and R2 are defined as in the formula I, with alkenylcarbamates of the formula see diagramm : EP0000531,P6,F2 in which R3 and n are defined as in the formula I and R'4 is hydrogen, (C1-4) alkyl or the group see diagramm : EP0000531,P6,F3 in which A, n and R3 are defined as in the formulae I and II, at elevated temperature and in the presence of peroxides as catalysts, which comprises using the dialkylphosphites III and the alkenylcarbamates IV, if R'4 is hydrogen or a (C1-4) alkyl group, in a molar ratio of 1 : 1 or, if R'4 in the alkenylcarbamates IV is the group V, in a molar ratio of 2:1.

Abstract (de)

Dialkoxyphosphonoalkylcarbamate der Formel <IMAGE> in der R1 und R2 = gleiche oder verschiedene (C1-C4)-Alkyreste, R3 = H oder CH₃, R4 = H, (C1-C4)- Alkyl oder die Gruppe <IMAGE> worin A = (C2-C4)- Alkylengruppe n = 1 oder 2 werden hergestellt durch Umsetzung von Dialkylphosphiten und Alkenylcarbamaten in bestimmten Molverhältnis bei erhöhter Temperatur und in Gegenwart von Peroxiden als Katalysatoren; sie haben Bedeutung z.B. als Flammeschutzmittel für Textilgut, insbesondere solchem auf Cellulosebasis.

IPC 1-7

C07F 9/40

IPC 8 full level

C07F 9/40 (2006.01); **D06M 13/44** (2006.01)

CPC (source: EP)

C07F 9/4006 (2013.01)

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- FR 2229705 A1 19741213 - BAYER AG [DE]
- FR 2258390 A1 19750818 - BAYER AG [DE]
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- JOURNAL OF ORGANIC CHEMISTRY, 25, Seiten 665-666 (1960)

Cited by

WO2005103522A1; WO2014154969A1

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