

Title (en)

Process for the preparation of dialkoxyphosphono alkyl carbamates.

Title (de)

Verfahren zur Herstellung von Dialkoxyphosphonoalkylcarbamaten.

Title (fr)

Procédé de préparation de dialkoxyphosphonoalkylcarbamates.

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)-Alkylreste, 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 Flammschutzmittel für Textilgut, insbesondere solchem auf Cellulosebasis.

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**C07F 9/40**

IPC 8 full level

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CPC (source: EP)

**C07F 9/4006** (2013.01)

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

Cited by

WO2005103522A1; WO2014154969A1

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