

Title (en)
PROCESS FOR THE PREPARATION OF OXIRANES SUBSTITUTED BY HALOGEN ALKYL

Publication
EP 0000554 B1 19820210 (DE)

Application
EP 78100456 A 19780720

Priority
DE 2734085 A 19770728

Abstract (en)
[origin: EP0000554A1] 1. Process for the preparation of halogenoalkyl-substituted oxiranes from halogenoalkyl-substituted olefines and percarboxylic acids, characterised in that a chloroalkyl- or bromoalkyl-substituted monoolefine of the general formula see diagramm : EP0000554,P9,F1 wherein R1 and R4 independently of one another denote hydrogen, C1 - to C5 -alkyl, C5 - to C7 -cycloalkyl, monochloro-C1 - to C5 -alkyl, monobromo-C1 - to C5 -alkyl, dichloro-C1 - to C5 -alkyl, dibromo-C1 - to C5 -alkyl, monochloro-C5 - to C7 -cycloalkyl, monobromo-C5 - to C7 -cycloalkyl, dichloro-C5 - to C7 -cycloalkyl or dibromo-C5 - to C7 -cycloalkyl and R2 and R3 independently of one another represent hydrogen, C1 - to C5 -alkyl, monochloro-C1 - to C5 -alkyl, monobromo-C1 - to C5 -alkyl, dichloro-C1 - to C5 -alkyl and dibromo-C1 - to C5 -alkyl, or wherein the radicals R2 and R3 , together with the carbon atoms of the C=C double bond, can form a ring with up to 12 carbon atoms, at least one of the radicals R1 to R4 being a dichloro or dibromo radical of the type mentioned, or at least two of the radicals R1 to R4 being a chlorine- or bromine-containing radical of the type mentioned, and the chloroalkyl- or bromoalkyl-substituted monoolefine containing at least 4 carbon atoms, is reacted with a solution of a percarboxylic acid containing 3 to 4 carbon atoms in a chlorinated hydrocarbon containing 1 to 8 carbon atoms at a molar ratio of monoolefine to percarboxylic acid of 1.1 : 1 to 10 : 1 and at a temperature of 30 degrees C to 100 degrees C, the percarboxylic acid containing up to 5% by weight of water and up to 2% by weight of hydrogen peroxide, and the percarboxylic acid solution used for the reaction having a mineral acid content of below 50 ppm.

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CPC (source: EP)
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EP 0000554 A1 19790207; **EP 0000554 B1 19820210**; AT 358057 B 19800825; AT A544578 A 19800115; CA 1120047 A 19820316; DD 138067 A5 19791010; DE 2734085 A1 19790222; DE 2861619 D1 19820318; JP S5424806 A 19790224

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EP 78100456 A 19780720; AT 544578 A 19780726; CA 308193 A 19780726; DD 20695778 A 19780726; DE 2734085 A 19770728; DE 2861619 T 19780720; JP 9056778 A 19780726