

Title (en)
STABLE CRYSTALLINE POLYMORPH OF 2-(2-CHLORO-4-MESYL- BENZOYL)-CYCLOHEXANE/-1,3-DIONE AND PROCESS FOR PREPARING THE SAME

Title (de)
STABILES KRISTALLINES POLYMORPH VON 2-(2-CHLORO-4-MESYL- BENZOYL)-CYCLOHEXAN/-1,3-DION UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
POLYMORPHE CRISTALLIN STABLE DE 2-(2-CHLORO-4-MÉSYL-BENZOYL)-CYCLOHEXANE-1,3-DIONE, ET PROCÉDÉ D'ÉLABORATION CORRESPONDANT

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Abstract (en)
[origin: WO2011005127A1] The present invention relates to a new stable crystalline polymorph of 2-(2-chloro-4-mesyl-benzoyl)-cyclohexane-1,3-dione and to a process for preparing the same. More particularly, it relates to compositions having said polymorph for controlling unwanted plants. The process for preparing crystalline polymorph of 2-(2-chloro-4-mesyl-benzoyl)-cyclohexane-1,3-dione comprising the following steps of: 1) preparation of 4-sulfomethyl-2-chloro benzoyl chloride; 2) preparation of enol ester derivative; 3) rearrangement of enol ester derivative to 2-(2-chloro-4-mesyl-benzoyl)-cyclohexane-1,3-dione; and 4) purification of 2-(2-chloro-4-mesyl-benzoyl)-cyclohexane-1,3-dione. The polymorphic structure is assessed using infra-red and Raman spectra and X-ray crystallography data. The polymorph has a powder X-Ray diffraction spectrum with characteristic peaks at $2\theta = 17.2^\circ, 17.6^\circ, 19.1^\circ, 21.0^\circ, 26.0^\circ$ and 28.7° . A stable formulation of the above mentioned polymorph is used as herbicide.

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Citation (search report)
See references of WO 2011005127A1

Citation (examination)
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• EP 0186117 A2 19860702 - STAUFFER CHEMICAL CO [US]
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