

Title (en)

A NOVEL FORM OF METCONAZOLE, A PROCESS FOR ITS PREPARATION AND USE OF THE SAME

Title (de)

NEUE FORM VON METCONAZOL, VERFAHREN ZU IHRER HERSTELLUNG UND IHRE VERWENDUNG

Title (fr)

NOUVELLE FORME DE METCONAZOLE, SON PROCÉDÉ DE PRÉPARATION ET SON UTILISATION

Publication

EP 3924346 A4 20221221 (EN)

Application

EP 19914791 A 20191121

Priority

- GB 201901847 A 20190211
- CN 2019119925 W 20191121

Abstract (en)

[origin: GB2581208A] A crystalline modification I of 5-(4-chlorobenzyl)-2,2-dimethyl-1- H -1,2,4-triazol-1-ylmethyl)cyclopentanol (metconazole) characterized by exhibiting at least 3 of the following reflexes, in any combination, as $2\theta \pm 0.2$ degree in an X-ray powder diffractogram (X-RPD) recorded using Cu—K α radiation at 25 °C: 10.3 ± 0.2 , 15.6 ± 0.2 , 20.6 ± 0.2 , 22.2 ± 0.2 , 23.3 ± 0.2 . The crystalline modification I may be further characterized by exhibiting functional group vibrational peaks at wavenumbers ($\text{cm}^{-1} \pm 0.2\%$) of one or more of 3337, 2963, 2871, 1508, 1492, 1425, 1406, 1385, 1271, 1137 and 1013; or by exhibiting a differential scanning calorimetry (DSC) profile having an endothermic melting peak maximum at 113.3 °C. The crystalline modification may be characterized by spectra substantially as shown in Figures 1-3. A method of preparing the crystalline modification is also provided, particularly wherein the crystalline modification is provided by recrystallizing metconazole from xylene, methyl t-butyl ether or a mixture thereof, such method may include the use of seed crystals of the crystalline modification. Compositions comprising the crystalline modification and its use in controlling fungal infestations are also provided.

IPC 8 full level

C07D 249/08 (2006.01); **A01N 43/50** (2006.01); **A01P 3/00** (2006.01)

CPC (source: EP GB)

A01N 43/653 (2013.01 - EP GB); **C07D 249/08** (2013.01 - EP GB)

Citation (search report)

- [A] EP 0655443 A2 19950531 - KUREHA CHEMICAL IND CO LTD [JP]
- [I] CN 104710372 A 20150617 - UNIV SHANGHAI JIAOTONG, et al
- [I] ZHANG ET AL: "Study on the synthesis and process of metconazole", MASTER DISSERTATION, EAST CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY, CN, 31 December 2012 (2012-12-31), pages 1 - 78, XP009522672
- See references of WO 2020164287A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

GB 201901847 D0 20190403; **GB 2581208 A 20200812**; **GB 2581208 B 20210728**; EP 3924346 A1 20211222; EP 3924346 A4 20221221; WO 2020164287 A1 20200820

DOCDB simple family (application)

GB 201901847 A 20190211; CN 2019119925 W 20191121; EP 19914791 A 20191121