

**Certification of Substances Department**

**Certificate of suitability**  
**No. R1-CEP 2014-046-Rev 00**

1 *Name of the substance:*

2 **FUSIDIC ACID**

3 *Name of holder:*

4 **JOYANG LABORATORIES**

5 Haidu North Road

6 Sheyang Economic Development Zone

7 China-224 300 Yancheng, Jiangsu Province

8 *Site(s) of production:*

9 **SEE ANNEX 1**

10

**THIS CERTIFICATE SUPERSEDES THE PREVIOUS CERTIFICATE**

11

**R0-CEP 2014-046-REV 01**

12 After examination of the information provided on the manufacturing method and subsequent  
13 processes (including purification) for this substance on the site(s) of production listed in annex, we  
14 certify that the quality of the substance is suitably controlled by the current version of the  
15 monograph **FUSIDIC ACID** no. 798 of the European Pharmacopoeia, current edition including  
16 supplements, only if it is supplemented by the test(s) mentioned below, based on the analytical  
17 procedure(s) given in annex.

18 – Test for residual solvents by gas chromatography (Annex 2)  
19 *n*-Hexane not more than 290 ppm  
20 Methanol not more than 3000 ppm  
21 Ethanol not more than 5000 ppm

22 In the last steps of the synthesis water is used as solvent.


23 No elemental impurity classified in ICH Q3D is intentionally introduced in the manufacture of  
24 the substance.

25 The re-test period of the substance is 3 years if stored at a temperature not exceeding 25°C in  
26 a polyethylene bag in an aluminium foil bag, placed in carton drums.

27 The holder of the certificate has declared the use of material of human or animal origin in the  
28 manufacture of the substance and there is no risk of viral contamination.

29 The submitted dossier must be updated after any significant change that may alter the quality,  
30 safety or efficacy of the substance.

- 31 Manufacture of the substance shall take place in accordance with the Good Manufacturing Practice  
32 and in accordance with the dossier submitted.
- 33 Failure to comply with these provisions will render this certificate void.
- 34 This certificate is renewed from **10 July 2020** according to the provisions of Resolution AP-CSP  
35 (07) 1, and of Directive 2001/83/EC and Directive 2001/82/EC and any subsequent amendment,  
36 and the related guidelines.
- 37 This certificate has two annexes, the first of 1 page, and the second of 2 pages.
- 38 This certificate has:  
39 lines.

  
On behalf of the  
Director of EDQM



Strasbourg, 25 June 2020

DECLARATION OF ACCESS *(to be filled in by the certificate holder under their own responsibility)*

**JOYANG LABORATORIES**, as holder of the certificate of suitability

**R1-CEP 2014-046-Rev 00 for Fusidic acid**

hereby authorises .....  
*(name of the pharmaceutical company)*

to use the above-mentioned certificate of suitability in support of their application(s) for the following  
Marketing Authorisation(s): *(name of product(s) and marketing number(s), if known)*

The holder also certifies that no significant changes to the operations as described in the CEP dossier  
have been made since the granting of this version of the certificate.

Date and Signature *(of the CEP holder)*:

Address: 7 Allée Kastner, CS 30026  
F-67081 Strasbourg (France)

Tel: +33 (0) 3 88 41 30 30 – Fax: +33 (0) 3 88 41 27 71 - e-mail: cep@edqm.eu

Internet: <http://www.edqm.eu>

**Certification of Substances Department**

**Annex 1: Site(s) of production for R1-CEP 2014-046-Rev 00**

**Production of Fusidic acid:**

JOYANG LABORATORIES

Haidu North Road

Sheyang Economic Development Zone

China-224 300 Yancheng, Jiangsu Province

### **Residual solvents:**

#### Chromatographic condition:

- Column: DB-624, 30m × 0.53mm × 3.0µm
- Detector: Hydrogen FID
- Carrier gas: N<sub>2</sub>
- Injection port temperature: 200 °C
- Flow rate: 4mL/min
- Column temperature: Maintain at 40°C for 6minutes, increase to 200 °C at the rate of 30 °C/minute. Keep the temperature for 3 minutes.
- Detector temperature: 250 °C
- Injection volume: 1mL

#### Headspace conditions:

Sample vial temperature: 80 °C

Equilibration time: 30 minutes

Reference solution: dissolve 0.3g Methanol, 0.5g Ethanol, 0.029g n-hexane, 0.5g Ethyl acetate in dimethyl sulfoxide and dilute to 100mL with the same solvent. Transfer 10mL of this solution to a 100mL volumetric flask. Dilute to the scale with dimethyl sulfoxide. Transfer 5mL of above solution to headspace bottle. Seal the headspace bottle for use.

Sample solution: dissolve 0.50g of the fusidic acid in 5mL of dimethyl sulfoxide. Seal the headspace bottle for use.

Blank solution: transfer 5mL of dimethyl sulfoxide in a 20mL headspace bottle.

#### System suitability:

RSD of six injections of reference solution should be not more than 10%.

#### Operation procedures:



Inject 1.0mL of standard solution and sample solution, record the chromatogram and data.

Calculation:

$$\text{Residual solvent (ppm)} = \frac{A_i \times W_s \times 10 \times 5}{A_s \times W_i \times 100 \times 100} \times 10^6$$

Where,

$A_i$ : peak area of solvent in sample solution;

$A_s$ : peak area of solvent in reference solution;

$W_i$ : weight of sample (g);

$W_s$ : weight of each component in reference to be examined (g);