# Medicines and Healthcare products Regulatory Agency CERTIFICATE NUMBER : UK API 40128 Insp GMP 40128/4100215-0007 CERTIFICATE OF GMP COMPLIANCE OF A MANUFACTURER(1),(2)

# Part 1

Issued following an inspection in accordance with : Regulation 331A of The Human Medicines Regulations 2012 (SI 2012/1916)

The competent authority of United Kingdom confirms the following :

The Manufacturer : QILU ANTIBIOTICS PHARMACEUTICAL COMPANY LIMITED

Site address : QILU ANTIBIOTICS PHARMACEUTICAL COMPANY LIMITED, 849 DONGJIA TOWN, LICHENG DISTRICT, JINAN CITY, CN-250105, CHINA

Is an active substance manufacturer that has been inspected in accordance with Regulation 327 of The Human Medicines Regulations 2012 (SI 2012/1916).

From the knowledge gained during inspection of this manufacturer, the latest of which was conducted on 17/11/2014, it is considered that it complies with

• The principles of GMP for active substances referred to in Regulation B17 and C17 of the Human Medicines Regulations 2012 (SI 2012/1916)

This certificate reflects the status of the manufacturing site at the time of the inspection noted above and should not be relied upon to reflect the compliance status if more than three years have elapsed since the date of that inspection. However, this period of validity may be reduced or extended using regulatory risk management principles by an entry in the Restrictions or Clarifying remarks field. This certificate is valid only when presented with all pages and both Parts 1 and 2. The authenticity of this certificate may be verified in MHRA-GMDP. If it does not appear, please contact the issuing authority.

- (1) Guidance on the interpretation of this template can be found in the Help menu of MHRA-GMDP database.
- (2) These requirements fulfil the GMP recommendations of WHO.

# Part 2

#### **Human Medicinal Products**

Manufacture of active substance. Names of substances subject to inspection :

- [3000017463] CEFOPERAZONE SODIUM STERILE
- [4000013905] CEFEPIME DIHYDROCHLORIDE MONOHYDRATE STERILE
- [3000000925] L-ARGININE STERILE
- [4000011403] CEFOTAXIME SODIUM STERILE
- [4000013903] CEFAZOLIN SODIUM STERILE
- [4000013904] CEFUROXIME SODIUM STERILE



- [4000008058] CEFTRIAXONE SODIUM STERILE
- [4000008765] CEFTAZIDIME PENTAHYDRATE STERILE
- [2000016869] CEFTAZIDIME PENTAHYDRATE WITH SODIUM CARBONATE FOR INJECTION

## 3. MANUFACTURING OPERATIONS - ACTIVE SUBSTANCES

#### CEFOPERAZONE SODIUM STERILE

3	1	

3.4

3.5

3.6

3.1

Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

B-lactam Antibiotics

3.1.2 Manufacture Of Crude Active Substance

#### **B-lactam Antibiotics**

- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)
  - Crystallisation, purification, blending
  - B-lactam Antibiotics
  - Manufacture of sterile active substance
  - 3.4.1 Aseptically prepared

#### **B-lactam Antibiotics**

- **General Finishing Steps**
- 3.5.1 Physical Processing Steps Drying, granulating and mixing B-lactam Antibiotics
- 3.5.2 Primary Packaging

#### **B-lactam Antibiotics**

3.5.3 Secondary Packaging

## **B-lactam Antibiotics**

- **Quality Control Testing**
- 3.6.1 Physical / Chemical testing

#### **B-lactam Antibiotics**

3.6.3 Microbiological testing (including sterility testing)

#### B-lactam Antibiotics

#### CEFEPIME DIHYDROCHLORIDE MONOHYDRATE STERILE

- Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates

#### **B-lactam Antibiotics**

3.1.2 Manufacture Of Crude Active Substance

**B-lactam Antibiotics** 



	<ul><li>3.1.3 Salt Formation/Purification steps (eg. Crystallisation)</li><li>Crystallisation, purification, blending</li><li>B-lactam Antibiotics</li></ul>	
3.4	Manufacture of sterile active substance	
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	
3.5	General Finishing Steps	
	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing B-lactam Antibiotics	
	3.5.2 Primary Packaging	•
	B-lactam Antibiotics	
	3.5.3 Secondary Packaging	.21
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
	B-lactam Antibiotics	
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
L-ARGININE STERILE		
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	
	Crystallisation, filtration, blending	
3.4	Manufacture of sterile active substance	
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	~
3.5	General Finishing Steps	
	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
$N_{II}$	B-lactam Antibiotics	$\mathcal{N}$

	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
	B-lactam Antibiotics	
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
CEFOTAXIME SODIUM STE	RILE	
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	01
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	
	Crystallisation, purification, blending	
	B-lactam Antibiotics	
3.4	Manufacture of sterile active substance	•
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	
3.5	General Finishing Steps	
	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
	B-lactam Antibiotics	
	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	•
	B-lactam Antibiotics	
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
CEFAZOLIN SODIUM STER	ILE	
3.1	Manufacture of Active Substance by Chemical Synthesis	

	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation) Lyophilisation, purification, blending B-lactam Antibiotics	
3.4	Manufacture of sterile active substance	
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	•
3.5	General Finishing Steps	
	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
	B-lactam Antibiotics	
	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
	B-lactam Antibiotics	
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
CEFUROXIME SODIUM STEI	RILE	
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	~
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	
	Crystallisation, purification, blending B-lactam Antibiotics	.25
3.4	Manufacture of sterile active substance	
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	
3.5	General Finishing Steps	

	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
	B-lactam Antibiotics	
	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
	B-lactam Antibiotics	~
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
CEFTRIAXONE SODIUM STE	RILE	
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
N	B-lactam Antibiotics	N
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	
	Crystallisation, purification, blending	
	B-lactam Antibiotics	
3.4	Manufacture of sterile active substance	
	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	
3.5	General Finishing Steps	
	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
	B-lactam Antibiotics	<b>N</b>
	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
$\mathcal{N}_{\mathcal{N}}$	B-lactam Antibiotics	$\nu_{\prime}$
<b>•</b>		<b>•</b>

**B-lactam Antibiotics** 

CEFTAZIDIME PENT	TAHYDRATE STERILE	
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation) Crystallisation, purification, blending	•
	B-lactam Antibiotics	
3.4	Manufacture of sterile active substance	$\sim$
•	3.4.1 Aseptically prepared	
	B-lactam Antibiotics	
3.5	General Finishing Steps	
0.0	3.5.1 Physical Processing Steps	
	Drying, granulating and mixing	
	B-lactam Antibiotics	
	3.5.2 Primary Packaging	
	B-lactam Antibiotics	
	3.5.3 Secondary Packaging	
	B-lactam Antibiotics	
3.6	Quality Control Testing	
	3.6.1 Physical / Chemical testing	
	B-lactam Antibiotics	
	3.6.3 Microbiological testing (including sterility testing)	
	B-lactam Antibiotics	
CEFTAZIDIME PENT	TAHYDRATE WITH SODIUM CARBONATE FOR INJECTION	
3.1	Manufacture of Active Substance by Chemical Synthesis	
	3.1.1 Manufacture Of Active Substance Intermediates	
	B-lactam Antibiotics	$\sim$
	3.1.2 Manufacture Of Crude Active Substance	
	B-lactam Antibiotics	
	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	
	Crystallisation, purification, blending	
	B-lactam Antibiotics	

3.4	Manufacture of sterile active substance
	3.4.1 Aseptically prepared
	B-lactam Antibiotics
3.5	General Finishing Steps
	3.5.1 Physical Processing Steps
	Drying, granulating and mixing
	B-lactam Antibiotics
	3.5.2 Primary Packaging
	B-lactam Antibiotics
	3.5.3 Secondary Packaging
	Delevery Application
	B-lactam Antibiotics
3.6	Quality Control Testing
	3.6.1 Physical / Chemical testing
	B-lactam Antibiotics
	3.6.3 Microbiological testing (including sterility testing)
$\mathcal{N}$	B-lactam Antibiotics
<b>Restrictions or Remarks</b>	
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Following a risk-based review of GMP compliance information conducted on 9th November 2017, the validity period of this certificate is extended to 9th November 2018.

Any restrictions related to the scope of this certificate:

40128/4100215-0007

Building		QC Room Line/equipment Testing	Products
Buildings aut	horised for EU products are		The certifcate covers the production of sterile
Workshop 50	0 and Workshop 300/1000		Cephalosporin materilas only
09/11/2017	9/11/2017 Name and signature of the authorised person of the Competent Authority of United Kingdom		
	Confidential		

Medicines and Healthcare products Regulatory Agency Tel : Confidential

