

# Medicines and Healthcare products Regulatory Agency

CERTIFICATE NUMBER : UK API 1108 Insp GMP/GDP 1108/1893-0019

## 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 : MACFARLAN SMITH LIMITED

Site address : MACFARLAN SMITH LIMITED, 10 WHEATFIELD ROAD, EDINBURGH, EH11 2QA, UNITED KINGDOM

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 19/12/2024 , 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.

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- (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 :

- [2000007584] FENTANYL CITRATE
- [2000015376] CODEINE SULFATE
- [2000006818] SUFENTANIL CITRATE
- [2000007868] HYDROMORPHONE HYDROCHLORIDE
- [1000007438] OXYCODONE
- [2000008247] MORPHINE HYDROCHLORIDE
- [2000008051] APOMORPHINE HYDROCHLORIDE

- [2000008305] METHYLPHENIDATE HYDROCHLORIDE
- [1000003943] COCAINE
- [2000007776] DIAMORPHINE HYDROCHLORIDE
- [2000007435] REMIFENTANIL HYDROCHLORIDE
- [2000008238] NALOXONE HYDROCHLORIDE
- [2000008277] BUPRENORPHINE HYDROCHLORIDE
- [4000006163] MORPHINE SULFATE
- [1000003221] DIAMORPHINE
- [2000008540] ALFENTANIL HYDROCHLORIDE
- [1000002290] FENTANYL
- [4000008052] DIHYDROCODEINE HYDROGEN TARTRATE
- [2000007943] COCAINE HYDROCHLORIDE
- [1000003912] CODEINE
- [1000010779] MORPHINE
- [2000008245] MORPHINE TARTRATE
- [4000006570] CODEINE PHOSPHATE HEMIHYDRATE
- [1000007171] BUPRENORPHINE
- [2000006722] OXYCODONE HYDROCHLORIDE
- [1000009886] PHOLCODINE

### 3. MANUFACTURING OPERATIONS - ACTIVE SUBSTANCES

#### FENTANYL CITRATE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)
    - Salt formation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps
    - Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing
  - 3.6.2 Microbiological testing (excluding sterility testing)

#### CODEINE SULFATE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance

- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation
- 3.5 General Finishing Steps
- 3.5.1 Physical Processing Steps  
Drying, Milling
- 3.5.2 Primary Packaging
- 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
- 3.6.1 Physical / Chemical testing

#### SUFENTANIL CITRATE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
- 3.1.1 Manufacture Of Active Substance Intermediates
- 3.1.2 Manufacture Of Crude Active Substance
- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Recrystallisation
- 3.5 General Finishing Steps
- 3.5.1 Physical Processing Steps  
Drying, Sieving
- 3.5.2 Primary Packaging
- 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
- 3.6.1 Physical / Chemical testing
- 3.6.2 Microbiological testing (excluding sterility testing)

#### HYDROMORPHONE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
- 3.1.1 Manufacture Of Active Substance Intermediates
- 3.1.2 Manufacture Of Crude Active Substance
- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Recrystallisation
- 3.5 General Finishing Steps
- 3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

3.6.2 Microbiological testing (excluding sterility testing)

## OXYCODONE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying and milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

## MORPHINE HYDROCHLORIDE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

3.6.2 Microbiological testing (excluding sterility testing)

#### APOMORPHINE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt Formation, Filtration, Recrystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing
  - 3.6.2 Microbiological testing (excluding sterility testing)

#### METHYLPHENIDATE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing

#### COCAINE

- 3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Recrystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

#### DIAMORPHINE HYDROCHLORIDE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt Formation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

3.6.2 Microbiological testing (excluding sterility testing)

#### REMIFENTANIL HYDROCHLORIDE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt Formation, Recrystallisation

- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps
    - Drying, Sieving
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing
  - 3.6.2 Microbiological testing (excluding sterility testing)

#### NALOXONE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)
    - Salt formation, Recrystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps
    - Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing
  - 3.6.2 Microbiological testing (excluding sterility testing)

#### BUPRENORPHINE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)
    - Salt Formation, Crystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps
    - Drying, Milling



3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6

Quality Control Testing

3.6.1 Physical / Chemical testing

3.6.2 Microbiological testing (excluding sterility testing)

## MORPHINE SULFATE

3.1

Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)

Salt formation, Crystallisation

3.5

General Finishing Steps

3.5.1 Physical Processing Steps

Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6

Quality Control Testing

3.6.1 Physical / Chemical testing

3.6.2 Microbiological testing (excluding sterility testing)

## DIAMORPHINE

3.1

Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)

Recrystallisation

3.5

General Finishing Steps

3.5.1 Physical Processing Steps

Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging



- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing

#### ALFENTANIL HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt Formation, Filtration, Recrystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Sieving
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing
  - 3.6.2 Microbiological testing (excluding sterility testing)

#### FENTANYL

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Recrystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing

#### DIHYDROCODEINE HYDROGEN TARTRATE

- 3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

## COCAINE HYDROCHLORIDE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps  
Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

## CODEINE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps

Drying and milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

MORPHINE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps

Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

3.6.1 Physical / Chemical testing

MORPHINE TARTRATE

3.1 Manufacture of Active Substance by Chemical Synthesis

3.1.1 Manufacture Of Active Substance Intermediates

3.1.2 Manufacture Of Crude Active Substance

3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation

3.5 General Finishing Steps

3.5.1 Physical Processing Steps

Drying, Milling

3.5.2 Primary Packaging

3.5.3 Secondary Packaging

3.6 Quality Control Testing

### 3.6.1 Physical / Chemical testing

## CODEINE PHOSPHATE HEMIHYDRATE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing

## BUPRENORPHINE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance
  - 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation
- 3.5 General Finishing Steps
  - 3.5.1 Physical Processing Steps  
Drying, Milling
  - 3.5.2 Primary Packaging
  - 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
  - 3.6.1 Physical / Chemical testing

## OXYCODONE HYDROCHLORIDE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
  - 3.1.1 Manufacture Of Active Substance Intermediates
  - 3.1.2 Manufacture Of Crude Active Substance

- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Salt formation, Crystallisation
- 3.5 General Finishing Steps
- 3.5.1 Physical Processing Steps  
Drying, Milling
- 3.5.2 Primary Packaging
- 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
- 3.6.1 Physical / Chemical testing
- 3.6.2 Microbiological testing (excluding sterility testing)

#### PHOLCODINE

- 3.1 Manufacture of Active Substance by Chemical Synthesis
- 3.1.1 Manufacture Of Active Substance Intermediates
- 3.1.2 Manufacture Of Crude Active Substance
- 3.1.3 Salt Formation/Purification steps (eg. Crystallisation)  
Crystallisation
- 3.5 General Finishing Steps
- 3.5.1 Physical Processing Steps  
Drying, Milling
- 3.5.2 Primary Packaging
- 3.5.3 Secondary Packaging
- 3.6 Quality Control Testing
- 3.6.1 Physical / Chemical testing

#### Restrictions or Remarks

This certificate is issued based on a desk-based assessment of GMP compliance information provided by the manufacturer. This certificate should be used in combination with the relevant authorisation/registration. A risk-based site inspection programme remains in force.

19/12/2024	Name and signature of the authorised person of the Competent Authority of United Kingdom Confidential Medicines and Healthcare products Regulatory Agency Tel : Confidential
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