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.

- (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)	
111.	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	
` WX ,	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) Crytsallisation
3.5	General Finishing Steps
	3.5.1 Physical Processing Steps
1/1,	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 HYDROCHLORID	E
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	HADBUCHI	UBIDE

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

	3.1.2 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 HYDROCHLO	RIDE	
3.1	Manufacture of Active Substance by Chemical Synthesis	
M_{II}	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	
" III "	3.1.3 Salt Formation/Purification steps (eg. Crystallisation)	

Salt Formation, Recrystallisation

3.1.1 Manufacture Of Active Substance Intermediates

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 HYDROCHLORIE	DE
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
M_{II}	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 HYDROCH	HLORIDE
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
VK.	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
11.	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
1 V	Drying, Milling
	3.5.2 Primary Packaging
	3.5.3 Secondary Packaging

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

	3.1.2 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
M_{II}	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
0.0	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

3.1.1 Manufacture Of Active Substance Intermediates

	3.5.1 Physical Processing Steps Drying and milling
	3.5.2 Primary Packaging
	- Control of the cont
	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
171,	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
V. V.	-
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 Manufacture of Active Substance by Chemical Synthesis 3.1

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

Quality Control Testing 3.6

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

3.6.1 Physical / Chemical testing

3.5.3 Secondary Packaging

Quality Control Testing

Restrictions or Remarks

3.6

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
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Medicines and Healthcare products Regulatory Agency
Tel: Confidential