

Hessian Office For Health And Care

CERTIFICATE NUMBER: **DE_HE_01_GMP_2022_0181**

CERTIFICATE OF GMP COMPLIANCE OF A MANUFACTURER^{1,2}

Part 1

Issued following an inspection in accordance with Art. 111(5) of Directive 2001/83/EC as amended

The competent authority of Germany confirms the following:

The manufacturer: ***Euroapi Germany GmbH***

Site address: ***Brueningstrasse 50, Hoechst, Frankfurt Am Main, 65929***

OMS Organisation Id. / OMS Location Id.: ***ORG-100039255 / LOC-100061797***

Is an active substance manufacturer that has been inspected in accordance with Art. 111(1) of Directive 2001/83/EC.

From the knowledge gained during inspection of this manufacturer, the latest of which was conducted on **2022-03-04**, it is considered that it complies with:

- The principles of GMP for active substances³ referred to in Article 47 of Directive 2001/83/EC.

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. Updates to restrictions or clarifying remarks can be identified through the EudraGMDP website (<http://eudragmdp.ema.europa.eu/>). 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 EudraGMDP. If it does not appear, please contact the issuing authority.

¹The certificate referred to in paragraph Art. 111(5) of Directive 2001/83/EC is also applicable to importers.

²Guidance on the interpretation of this template can be found in the Interpretation of the Union format for GMP certificate.

³These requirements fulfil the GMP recommendations of WHO.

Part 2

Human Medicinal Products

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

Buserelin Starting material: Dipeptide/Hepapeptide(en)

Ciclopirox Starting material: Batrafene pyrone(en)

Ciclopirox Olamine Starting material: Batrafene pyrone(en)

Clobazam Starting material: Chlorophamide(en)

Fexofenadine Hydrochloride (current process) Starting material: Azacyclonol, Benzyl nitrile, 4-Chlorbutyl chloride, Hydrochloric Acid 30%, Methyl chloride(en)

Fexofenadine Hydrochloride (2nd generation process) Starting material: p-CPKF, Isobutyronitrile, Azacyclonol(en)

Furosemide Starting material: Lasamide, 2-Furfurylamine(en)

Glimepiride Starting material: Glimepiride-sulfonamide, Chloroformic acid methyl ester, Trans-4-methylcyclohexyl ammonium acetate(en)

Gonadorelin Acetat Starting material: Dipeptide, Octapeptide(en)

Ketoprofen Starting material: 2-(3-carboxyphenyl)-propionitrile(en)

Leflunomide Starting material: 4-Trifluoromethyl-aniline, 5-Methylisoxazole-4-carboxylic acid(en)

Levomethadon Hydrochloride Starting material: R,S-4-(dimethylamino) 2,2-diphenylpentane nitrile(en)

Lixisenatide Starting material: Amino acids(en)

Metamizole Magnesium (Granules) Starting material: Methylene-bis, Paraformaldehyde, Magnesium hydroxide, Sulphur dioxide(en)

Metamizole Magnesium (Powder) Starting material: Methylene-bis, Paraformaldehyde, Magnesium hydroxide, Sulphur dioxide(en)

Metamizole Sodium Starting material: Methylene-bis, Paraformaldehyde, Sodium metabisulphite(en)

Nadolol Starting material: 5,8-dihydro-1-naphthole, Epichlorhydrine, tert-Butylamine(en)

Noradrenaline Hydrochloride Starting material: Dibenzylaminoacetyl catechol hydrochloride(en)

Noradrenaline Tartrate Starting material: Dibenzylaminoacetyl catechol hydrochloride(en)

Pethidine Hydrochloride Starting material: Benzylpethidine(en)

Piretanide Starting material: Phenoxypiretane, 2,5-Dimethoxytetrahydrofuran(en)

Prednicarbate Starting material: Prednisolone(en)

Ramipril Starting material: N-[1(1S)-Ethoxycarbonyl-3-phenyl-propyl]-(S)-alanine "(1S,3S,5S)-2-Azabicyclo-[3.3.0]-octane-3-carboxylic benzyl ester 2,3-dibenzoyl-L-tartrate" "(1S,3S,5S)-2-Azabicyclo-[3.3.0]-octane-3-carboxylic benzyl ester hydrochloride"(en)

Glimepiride (2nd generation process) Starting material: trans-4-Methylcyclohexyl isocyanate, 3-Ethyl-4-methyl-2-oxo-3-pyrroline, 4-(2-Aminoethyl)-benzene sulfonamide(en)

Teriflunomide Starting material: 4-Trifluoromethyl-aniline, Cyanoacetic acid(en)

3. MANUFACTURING OPERATIONS - ACTIVE SUBSTANCES

Active Substance: Buserelin Starting material: Dipeptide/Hepapeptide

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:

Chromatographic purification; Precipitation, Acetate salt

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| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Ciclopirox Starting material: Batrafene pyrone | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| Active Substance:Ciclopirox Olamine Starting material: Batrafene pyrone | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Precipitation from ethyl acetate after combining Ciclopirox crude with mono ethanolamine</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> |

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| | <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| Active Substance:Clobazam Starting material: Chlorophamide | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Re-crystallization of Clobazam crude from 2-propanol</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, milling</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| Active Substance:Fexofenadine Hydrochloride (current process) Starting material: Azacyclonol, Benzyl nitrile, 4-Chlorbutyryl chloride, Hydrochloride Acid 30%, Methyl chloride | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of the water-free salt with an acetone/ethyl acetate mixture</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, milling</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for</p> |

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| | <p>identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| <p>Active Substance:Fexofenadine Hydrochloride (2nd generation process) Starting material: p-CPKF, Isobutyronitrile, Azacyclonol</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of the anhydrous salt with an acetone / Ethylacetate mixture</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: drying and milling</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| <p>Active Substance:Furosemide Starting material: Lasamide, 2-Furfurylamine</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of the sodium salt with acetic acid</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
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| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| <p>Active Substance:Glimepiride Starting material: Glimepiride-sulfonamide, Chloroformic acid methyl ester, Trans-4-methylcyclohexyl ammonium acetate</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, milling</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| <p>Active Substance:Gonadorelin Acetat Starting material: Dipeptide, Octapeptide</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Chromatographic purification; Precipitation, Acetate salt</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |

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| Active Substance:Ketoprofen Starting material: 2-(3-carboxyphenyl)-propionitrile | |
| 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: Re-Crystallization of Ketoprofen from Xylol by seeding |
| 3.5 | General Finishing Steps |
| | 3.5.1 Physical processing steps: Drying 3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance) 3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance) 3.5.4 Other: Storage, transport |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing 3.6.2 Microbiological testing excluding sterility testing 3.6.4 Biological Testing |
| Active Substance:Leflunomide Starting material: 4-Trifluoromethyl-aniline, 5-Methylisoxazole-4-carboxylic acid | |
| 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: Crystallization of Leflunomide crude with 2-propanol and purified water |
| 3.5 | General Finishing Steps |
| | 3.5.1 Physical processing steps: Drying 3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance) 3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance) 3.5.4 Other: Storage, transport |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing |
| Active Substance:Levomethadon Hydrochloride Starting material: R,S-4-(dimethylamino) 2,2-diphenylpentane nitrile | |

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| 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: Crystallization of Levomethadone base pure with hydrochloric acid |
| 3.5 | General Finishing Steps |
| | 3.5.1 Physical processing steps: Drying, sieving 3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance) 3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance) 3.5.4 Other: Storage, transport |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing 3.6.2 Microbiological testing excluding sterility testing 3.6.4 Biological Testing |

Active Substance:Lixisenatide Starting material: Amino acids

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| 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: Chromatographic purification |
| 3.5 | General Finishing Steps |
| | 3.5.1 Physical processing steps: Lyophilization 3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance) 3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance) 3.5.4 Other: Storage, transport |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing 3.6.2 Microbiological testing excluding sterility testing 3.6.4 Biological Testing |

Active Substance:Metamizole Magnesium (Granules) Starting material: Methylene-bis, Paraformaldehyde, Magnesium hydroxide, Sulphur dioxide

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| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
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| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization by cooling</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, granulate, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Metamizole Magnesium (Powder) Starting material: Methylene-bis, Paraformaldehyde, Magnesium hydroxide, Sulphur dioxide | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization by cooling</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Metamizole Sodium Starting material: Methylene-bis, Paraformaldehyde, Sodium metabisulphite | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | 3.1.1 Manufacture of active substance intermediates |

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| | <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization by cooling in a mixture of Ethanol and purified water</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Nadolol Starting material: 5,8-dihydro-1-naphthole, Epichlorhydrine, tert-Butylamine | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: After distillation Nadolol is crystallized in Acetone by cooling</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| Active Substance:Noradrenaline Hydrochloride Starting material: Dibenzylaminoacetyl catechol hydrochloride | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of Noradrenaline with tert.-butyl-methylether</p> |

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| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Noradrenaline Tartrate Starting material: Dibenzylaminoacetyl catechol hydrochloride | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization on Noradrenaline tartrate crude from water. Washing with an ethanol/water mixture.</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Pethidine Hydrochloride Starting material: Benzylpethidine | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of Pethidin base pure in 2-propanol with hydrogen chloride gas.</p> |
| 3.5 | General Finishing Steps |

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| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| Active Substance:Piretanide Starting material: Phenoxy piretane, 2,5-Dimethoxytetrahydrofuran | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Re-crystallization</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> <p>3.6.4 Biological Testing</p> |
| Active Substance:Prednicarbate Starting material: Prednisolone | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: After distillation Prednicarbate is crystallized by seeding</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> |

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| | <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| <p>Active Substance: Ramipril Starting material: N-[1(1S)-Ethoxycarbonyl-3-phenyl-propyl]-(S)-alanine "(1S,3S,5S)-2-Azabicyclo-[3.3.0]-octane-3-carb-ox ylic benzyl ester 2,3-dibenzoyl-L-tartrate" "(1S,3S,5S)-2-Aza bicyclo-[3.3.0]-octane-3-carboxylic benzyl ester hydro chloride"</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization of Ramipril crude with diisopropyl ether</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: Drying, sieving</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance)</p> <p>3.5.4 Other: Storage, transport</p> |
| 3.6 | Quality Control Testing |
| | <p>3.6.1 Physical / Chemical testing</p> <p>3.6.2 Microbiological testing excluding sterility testing</p> |
| <p>Active Substance: Glimepiride (2nd generation process) Starting material: trans-4-Methylcyclohexyl isocya nate, 3-Ethyl-4-methyl-2-oxo-3-pyrroline, 4-(2-Aminoethyl)-benzene sulfonamide</p> | |
| 3.1 | Manufacture of Active Substance by Chemical Synthesis |
| | <p>3.1.1 Manufacture of active substance intermediates</p> <p>3.1.2 Manufacture of crude active substance</p> <p>3.1.3 Salt formation / Purification steps: Crystallization</p> |
| 3.5 | General Finishing Steps |
| | <p>3.5.1 Physical processing steps: drying, milling</p> <p>3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance)</p> <p>3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for</p> |

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| | identification or traceability (lot numbering) of the active substance) |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing 3.6.2 Microbiological testing excluding sterility testing |
| Active Substance:Teriflunomide Starting material: 4-Trifluormethyl-aniline, Cyanoacetic acid | |
| 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: Re-Crystallization of Teriflunomide crystalline from ethylacetate |
| 3.5 | General Finishing Steps |
| | 3.5.1 Physical processing steps: Drying, milling 3.5.2 Primary Packaging (enclosing / sealing the active substance within a packaging material which is in direct contact with the substance) 3.5.3 Secondary Packaging (placing the sealed primary package within an outer packaging material or container. This also includes any labelling of the material which could be used for identification or traceability (lot numbering) of the active substance) 3.5.4 Other: Storage, transport |
| 3.6 | Quality Control Testing |
| | 3.6.1 Physical / Chemical testing 3.6.2 Microbiological testing excluding sterility testing |

2022-10-18

Name and signature of the authorised person of the
Competent Authority of

Confidential
Regierungspräsidium Darmstadt
Tel:**Confidential**
Fax:**Confidential**