

Certificate of Analysis

Bestätigung der ordentlichen Prüfung

Product: Produkt	Buprenorphin Mepha 52,5µg/h (30) CH VK8	Article-No.: Artikel-Nr.	3319628
Country: Importland	Switzerland	Order No.: Auftrags-Nr.	1063693
LTS Lot-No.: LTS Ch.-B.	7162738B	Customer-Lot No.: Kunden Ch.-B.	70498D205
Date of manufacture: Herstelldatum	13.04.2018	Expiry Date: Verfalldatum	03.2021

Test parameters Prüfpunkte	Specified Soll	Result Ergebnis
Appearance	Corresponds to requirement	corresponds
Identity by Marquis: violet colour/spot	Marquis-test / verum corresponds	corresponds. violet spot
Identity by HPLC	Retention time corresponds to standard	Retention time corresponds
Dimension web longitudinal / mean	70 - 74 Millimeter	72 Millimeter
Dimension web crossdirection / mean	95 - 99 Millimeter	97 Millimeter
Dimension reservoir longitudinal / mean	49.5 - 50.5 Millimeter	50.1 Millimeter
Dimension reservoir crossdirection /mean	74.5 - 75.5 Millimeter	75.0 Millimeter
Content / mean	27.6 - 32.4 mg/TTS	30.5 mg/TTS
Content uniformity EP 2.9.6 test C	Content uniformity EP 2.9.6 test C	corresponds to EP 2.9.6 test C
Content uniformity EP 2.9.6 test C /mean	90.0 - 110.0 %	101.7 %
Content uniformity EP 2.9.6 test C / min	nlt. 75.0 %	98.8 %
Content uniformity EP 2.9.6 test C / max	nmt. 125.0 %	100.9 %
Content uniformity EP 2.9.40 acc. value	nmt. 15.0	2.3
Content uniformity EP 2.9.40 level	Content uniformity EP 2.9.40	corresponds EP 2.9.40 level 1 (n=10)
In vitro release 0,5h / mean	nmt. 10.5 mg/TTS	8.4 mg/TTS
In vitro release 2h / mean	9.0 - 21.0 mg/TTS	17.4 mg/TTS
In vitro release 24h / mean	nlt. 24.0 mg/TTS	29.4 mg/TTS
In vitro release 0,5h / mean (%)	nmt. 35 %	28 %
In vitro release 2h / mean (%)	30 - 70 %	58 %
In vitro release 24h / mean (%)	nlt. 80 %	98 %
Rel.subst.: Norbuprenorphine	nmt. 0.5 %	< 0.1 %
Rel.subst.: Buprenorphine-N-oxide	nmt. 0.5 %	< 0.1 %
Rel.subst.: Individual unknown	nmt. 0.5 %	< 0.1 %
Rel.subst.: Total	nmt. 1.5 %	< 0.1 %
Residual solvents: Toluene	nmt. 0.002 %	< 0.001 %
Residual solvents: Isopropanol	nmt. 0.002 %	< 0.001 %
Residual solvents: Ethylacetate	nmt. 0.07 %	0.01 %


Product: Produkt	Buprenorphin Mepha 35µg/h (20) CH VK8		
	Article-No.: Artikel-Nr.	3319627	
LTS Lot-No.: LTS Ch.-B.	7147668A	Customer-Lot No.: Kunden Ch.-B.	70468C105

Test parameters Prüfpunkte	Specified Soll	Result Ergebnis
Residual solvents: n-Heptane	nmt. 0.05 %	0.00 %
Residual solvents: Acetyl acetone	nmt. 0.02 %	< 0.00 %
Residual solvents: Ethanol	nmt. 0.05 %	0.00 %
Residual solvents: Total	nmt. 0.20 %	0.01 %
Peel adhesion / mean	3.0 - 70.0 Newton/TTS	16.3 Newton/TTS
Release strength / mean	10 - 500 cN/TTS	71 cN/TTS
Imprint TTS / Pouch	Imprint consistent and legible	Imprint corresponds
Pouch integrity	Tightness of pouches corresponds	corresponds = Pouches tight
Microbiology - periodical monitoring	MIBI - periodical monitoring - performed once a year	This batch was not tested

Used API 6506481, Buprenorphine Geel 2, A17BB0516, Janssen Pharmaceutica
Used API 6506481, Buprenorphine Geel 2, A17BB0658, Janssen Pharmaceutica

This report was approved and released by the responsible Head of QC electronically, and is valid without manual signature.

Freigabe 23.05.2018


08.06.2018 Andreas Beichert
Head of chem. quality control

Product: Produkt	Buprenorphin Mepha 52,5µg/h (30) CH VK8	Article-No.: Artikel-Nr.	3319628
LTS Lot-No.: LTS Ch.-B.	7162738B	Customer-Lot No.: Kunden Ch.-B.	70498D205

Test parameters Prüfpunkte	Specified Soll	Result Ergebnis
Residual solvents: n-Heptane	nmt. 0.05 %	0.00 %
Residual solvents: Acetyl acetone	nmt. 0.02 %	< 0.00 %
Residual solvents: Ethanol	nmt. 0.05 %	0.00 %
Residual solvents: Total	nmt. 0.20 %	0.01 %
Peel adhesion / mean	3.0 - 70.0 Newton/TTS	18.2 Newton/TTS
Release strength / mean	10 - 500 cN/TTS	71 cN/TTS
Imprint TTS / Pouch	Imprint consistent and legible	Imprint corresponds
Pouch integrity	Tightness of pouches corresponds	corresponds = Pouches tight
Microbiology - periodical monitoring	MIBI - periodical monitoring - performed once a year	This batch was not tested

Used API

6506481, Buprenorphine Geel 2, A17BB0658, Janssen Pharmaceutica

Used API

6506481, Buprenorphine Geel 2, A17BB0691, Janssen Pharmaceutica

This report was approved and released by the responsible Head of QC electronically, and is valid without manual signature.

Freigabe
23.05.18

12. JUNI 2018



Dr. Joscha Kotthaus
Head of the Quality Control

Certificate of Compliance

Bestätigung der ordentlichen Herstellung

Product: Produkt	Buprenorphin Mepha 52,5µg/h (30) CH VK8	Article-No.: Artikel-Nr.	3319628
Country: Importland	Switzerland	Order No.: Auftrags-Nr.	1063693
LTS Lot-No.: LTS Ch.-B.	7162738B	Customer-Lot No.: Kunden Ch.-B.	70498D205
Date of manufacture: Herstelldatum	13.04.2018	Expiry Date: Verfalldatum	03.2021

Manufacturing site: LTS Lohmann Therapie-Systeme AG, Lohmannstr.2, 56626 Andernach, Germany
Manufacturing license No.: DE_RP_01_MIA_2011_0023
 Nr. Herstellungserlaubnis
GMP Certificate No.: DE_RP_01_GMP_2018_0005
 GMP Zertifikatsnummer

OOS / Deviations, OOS / Abweichungen	Number, Nummer
No confirmed OOS-Results / Keine bestätigten OOS-Ergebnisse	-
No reportable Deviations / Keine zu berichtenden Abweichungen	-

Registration No: 65809 02
 Strength/Potency: 30 mg/TTS 52.5 µg/1 h Buprenorphin
 Dosage Form: TTS
 Package size and type: 8 Pouches per box
 Customer Material No: 95005817

This document was signed electronically and is valid without manual signature.

Release for shipment

I hereby confirm that the manufacturing stages referred to in the Technical Quality Agreement have been carried out in full compliance with the GMP requirements of the EU and the terms described in the Agreement for ensuring compliance with the requirements of the Marketing Authorisation(s) as provided by

Grünenthal GmbH
 Quality technical Agreement: 06.07.2015

Date	Time	Signatur Qualified Person
11.06.2018	20:23:55	Dr. Anita Noeske