BE 0044/15

CERTIFICATE OF RELEASE

Quality Control

Name of manufacturing site and releasing company : Klocke Pharma-Service GmbH
Sirastburger Str. 77
77767 Appenweier, Germany
Phone: +(49) 7805 / 401-0

A) BASIC DATA

PRODUCT :	Bisolvon Pulver 1kg Dose HU
COUNTRY :	Hungary
PRODUCT CODE MANUFACTURER :	80000974
BIX@SKU NUMBER :	10-138936
MANUFACTURING SPECIFICATION N° :	78575-P330-01-01
BATCH N° (MANUFACTURER) :	0268986
COUNTRY SPECIFIC BATCH N° :	0268986-1
ACTIVE INGREDIENTS :	Bromhexinhydrochlorid (BI)
TYPE OF PRIMARY PACKAGE :	cans
MARKETING AUTHORISATION NUMBER :	07.01.2154
MANUFACTURING AUTHORISATION N° :	DE_BW_01_MIA_2013_0075/DE_BW_01_Klocke Pharma
LOCAL REQUIREMENTS :	NO
MANUFACTURING DATE :	19. Februar 2015
EXPIRY DATE :	02 2018
QUANTITY :	393 pieces

B) RAW MATERIALS

We herewith certify that all raw materials have been tested and are in compliance with the requirements of the testing specifications.

C) MANUFACTURING / PACKAGING

The manufacturing and packaging documentation for the above mentioned product have been reviewed and it was determined that this lot number was manufactured and packaged according to the requirements of the manufacturing specifications and master production documents.

D) QUALITY ASSURANCE

All documentation has been found to be in compliance with the requirements of the above mentioned manufacturing specifications and master production documents. Explanations for deviations, if any are attached. This lot has been tested to the requirements of the above mentioned testing specification and the certificate of analysis is attached. All batch documentation is available upon request.

E) QUALITY ASSURANCE RELEASE

The product has been tested and complies with the requirements of the testing specifications and the relevant marketing authorisation. Any deviations have been assessed prior to batch release. The batch has been released by a Qualified Person for Release.

COMMENTS:

Released by:

Qualified Person (QP): 26.02.15
Datum / Signature Dr. Matthias Linder

KLOCKE

PHARMA-SERVICE GmbH, Straßburgerstr. 77, 77767 Appenweier

Certificate of Analysis

Product Name:	Bisolvon Powder 1 % HU	No. of Analysis:	15/001145
Batch / Lot No.:	0268986	Date of Manufacture:	February 19, 2015
Country specific		Batch Size:	408.963 kg
Batch No.:	0268986-1	Quantity:	393 Items
Article No.:	80000974	Dosage Form:	Can
Manufacturer:	Klocke Pharma-Service	Printed on:	March 26, 2015
Manufacturing site:	Appenweier-Urloffen	Analysis Date:	March 26, 2015
Testing Spec. No.:	78575-p510ls1041v2	Expiry Date:	02/2018

TESTING - PARAMETER	SPECIFICATION		RESULTS
Appearance	White, crystalline powder		corresponds
Uniformity of mass Uniformity of mass of delivered doses from multidose containers	6.70 ml dosing device: 5.0 g Average mass: Not more than 2 individual masses deviate from the average mass by more than 10 per cent and none derivates by more than 20 per cent.	4.5 - 5.5 g	5.1 g
Loss on drying	Specification:	7.0 - 9.0 %	8.4 %
Identification A) N-A 274 CL / Liquid chromatography	The uncorrected retention time of the active ingredient in the test solution must be the same as the uncorrected retention time of the active ingredient in the standard solution.		corresponds
B) N-A 274 CL / UV/VIS spectroscopy	Diode array spectrum complies with standard.		corresponds
Active ingredient content N-A 274 CL/ Liquid chromatography	Specification:	0.95 - 1.05 g/ 100 g	1.00 g/ 100 g
Active ingredient degradation Liquid chromatography	N-A 1740 CL: NAB 773 XX: Any unspecified degradation product: Total degradation products:	≤ 0.5 % ≤ 0.5 % ≤ 0.5 % ≤ 1.5 %	< 0.10 % < 0.10 % < 0.10 % < 0.10 %
Dissolution N-A 274 CL/ UV/VIS spectroscopy (Test the first 5 production batches. Then carry out the test on every 5th production batch therafter.)	Q: 70 % at 30 min. Stage S1: each of 6 tested units is not less than Q + 5 % Stage S2: average of 12 units (S1+S2) is equal to or greater than Q, and no unit less than Q - 15 % Stage S3: average of 24 units (S1+S2+S3) is equal to or greater than Q, not more than 2 units are less than Q - 15 %, and no unit is less than Q - 25 %		-
Uniformity of dosage units Content uniformity Liquid chromatography (Test the first 5 production batches. Then carry out the test on every 5th production batch therafter.)	Complies with current Ph.Eur.	AV ≤ L1 = 15.0	AV = 3.0

KLOCKE

PHARMA-SERVICE GmbH, Straßburgerstr. 77, 77767 Appenweier

Certificate of Analysis

Product Name:	Bisolvon Powder 1 % HU	**No. of Analysis:**	15/001145
Batch / Lot No.:	0268986	**Date of Manufacture:**	February 19, 2015
Country specific		**Batch Size:**	408.953 kg
Batch No.:	0268986-1	**Quantity:**	393 Items
Article No.:	80000974	**Dosage Form:**	Can
Manufacturer:	Klocke Pharma-Service	**Printed on:**	March 26, 2015
Manufacturing site:	Appenweier-Urloffen	**Analysis Date:**	March 26, 2015
Testing Spec. No.:	78575-p510ts1041v2	**Expiry Date:**	02/2018

TESTING - PARAMETER	SPECIFICATION	RESULTS
Microbial contamination (Test the first 5 production batches. Then carry out the test on 1 batch per year.)	Total aerobic microbial count (TAMC) /g: ≤ 10^3 CFU/g	< 10 CFU/g
	Total combined yeasts/moulds count (TYMC) /g: ≤ 10^2 CFU/g	< 10 CFU/g
	Escherichia coli/g: absent	absent

The product was tested according to GMP requirements and the actual authorized testing procedure.
The product has the required quality.

Head of Quality Control — March 26, 2015 (Date) — Hans Werle

i. A. Elke Müller