

Certification of Substances Department

Vamsi Labs Limited
Mr Govardhan ADAM
Plot No. A-14/15, M.I.D.C. Area
Chincholi
India – 413 255 Solapur, Maharashtra

CEP 2020-172-P01
Procedure owner: IPO

Strasbourg, 30 March 2022

Re: CEP 2020-172 / Clenbuterol Hydrochloride

Dear Mr Govardhan ADAM,

Please find enclosed the certificate granted following the treatment of your dossier.

If you find a mistake on the CEP, you should notify the EDQM within 3 months. After this period, any complaint may no longer be accepted.

You are reminded that in accordance with Resolution AP-CSP (07) 1, and as mentioned on the certificate, the submitted dossier must be updated after any change to its content, and this must be reported to EDQM.

For any question regarding the application, please contact us using the following e-mail address:
CEP@edqm.eu

Yours faithfully,



Certification of Substances Department

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Certificate of suitability
No. R0-CEP 2020-172 - Rev 00

1 *Name of the substance:*

2 **CLENBUTEROL HYDROCHLORIDE**

3 *Name of holder:*

4 **VAMSI LABS LIMITED**

5 Plot No. A-14/15, M.I.D.C. Area

6 Chincholi

7 India-413 255 Solapur, Maharashtra

8 *Site(s) of production:*

9 **SEE ANNEX 1**

10 After examination of the information provided on the manufacturing method and subsequent
11 processes (including purification) for this substance on the site(s) of production listed in annex, we
12 certify that the quality of the substance is suitably controlled by the current version of the
13 monograph **CLENBUTEROL HYDROCHLORIDE** no. 1409 of the European Pharmacopoeia,
14 current edition including supplements, only if it is supplemented by the test(s) mentioned below,
15 based on the analytical procedure(s) given in annex.

16 Any unspecified impurity detected by the test for related substances of the monograph is
17 limited to not more than 0.10%.

18 – Test for residual solvents by gas chromatography (Annex 2)
19 Methanol not more than 3000 ppm
20 Isopropyl alcohol not more than 5000 ppm

21 The following elemental impurity classified in ICH Q3D is intentionally introduced in the
22 manufacture of the substance: Selenium.

23 The re-test period of the substance is 60 months if stored in polyethylene bags (outer black),
24 placed in a polyethylene container.

25 The holder of the certificate has declared the absence of use of material of human or animal
26 origin in the manufacture of the substance.

27 The submitted dossier must be updated after any significant change that may alter the quality,
28 safety or efficacy of the substance.

- 29 Manufacture of the substance shall take place in accordance with the Good Manufacturing Practice
30 and in accordance with the dossier submitted.
- 31 Failure to comply with these provisions will render this certificate void.
- 32 This certificate is granted within the framework of the procedure established by the European
33 Pharmacopoeia Commission [Resolution AP-CSP (07) 1] for a period of five years starting from
34 **30 March 2022**. Moreover, it is granted according to the provisions of Directive 2001/83/EC and
35 Directive 2001/82/EC and any subsequent amendment, and the related guidelines.
- 36 This certificate has two annexes, the first of 1 page and the second of 4 pages.
37 This certificate has:
38 lines.



On behalf of the
Director of EDQM



Strasbourg, 30 March 2022

DECLARATION OF ACCESS *(to be filled in by the certificate holder under their own responsibility)*

Vamsi Labs Limited, as holder of the certificate of suitability

R0-CEP 2020-172 - Rev 00 for Clenbuterol hydrochloride

hereby authorises
(name of the pharmaceutical company)

to use the above-mentioned certificate of suitability in support of their application(s) for the following
Marketing Authorisation(s): *(name of product(s) and marketing number(s), if known)*

The holder also certifies that no significant changes to the operations as described in the CEP dossier
have been made since the granting of this version of the certificate.

Date and Signature *(of the CEP holder)*:

Certification of Substances Department

Annex 1: Site(s) of production for R0-CEP 2020-172 - Rev 00

Production of Clenbuterol hydrochloride:

VAMSI LABS LIMITED
Plot No. A-14/15, M.I.D.C. Area
Chincholi
India-413 255 Solapur, Maharashtra

<u>Residual solvent by GC:</u>	In-house
<u>Reagents and chemicals:</u>	
Methanol : AR grade or equivalent	
Ethanol : AR grade or equivalent	
Isopropyl alcohol : AR grade or equivalent	
Ethyl acetate : AR grade or equivalent	
1,4 Dioxane : AR grade or equivalent	
Benzene : AR grade or equivalent	
<u>Chromatographic conditions:</u>	
Column : DB-624. (6% Cynopropylphenyl and 94 % Dimethylpolysiloxane) 30 m x 0.53 mm ID, 3.00 µm or Equivalent.	
Name of detector : FID (Flame-ionization detector)	
Injection system : Auto	
Carrier gas : Nitrogen for chromatography.	

<u>Standard testing procedure</u>		<u>Reference No.</u>
<u>Instrument Parameters</u>		
Initial oven temperature	: 50°C	
Hold time	: 10 min.	
Rate	: 15°C/min.	
Final Oven temperature	: 250°C	
Final time	: 2 min.	
Injector temperature	: 250°C	
FID temperature (1)	: 250°C	
Carrier gas (N2) flow	: 3.0 ml/min	
Split ratio	: 5:1	
<u>Head Space Parameters</u>		
Vial oven temperature	: 80°C	
Loop temperature	: 90°C	
Transfer line temperature	: 100°C	
Injection time	: 0.1 min.	
Loop Fill time	: 0.2 min.	
Loop Equilibration time	: 0.05 min	
Vial Pressurization time	: 0.2 min.	
Vial Equilibration time	: 12 min.	
GC Cycle time	: 35 min.	
Diluent	: DMSO	
<u>Note:</u>		
Purity of diluent used in the analysis should be checked for any Impurities eluting at the same RT as that of the different residual solvents analyzed by this method.		

<u>Standard testing procedure</u>	Reference No.
<u>Preparation of standard stock solution:</u> Accurately weigh about 0.60 g of methanol, 1.0 g of ethanol, 1.0 g Isopropyl alcohol, 1.0 g of Ethyl Acetate and 0.076 g of 1,4 Dioxane in 100 ml volumetric flask containing about 10 ml of diluent. Make up the volume with diluent.	Sample quantity 1.0 gm
<u>Preparation of standard Benzene stock solution:</u> Accurately weigh about 0.050 gm of benzene in 25 ml DMSO and further take 1 ml and dilute to 100 ml with diluent.	
<u>Preparation of standard solution:</u> Take accurately 10 ml of standard stock solution and 2 ml of benzene stock solution and dilute to 100 ml with diluent.	
<u>Preparation of sample solution:</u> Accurately weigh and transfer about 1.0 g of sample to the headspace vial and add 5.0 ml of diluent and seal the vial immediately.	
<u>Preparation of Blank:</u> Transfer 5 ml of diluent into a dried vial and seal the vial immediately.	
<u>Evaluation of blank solution:</u> Place the sealed vial of the blank solution in the magazine and run the headspace. No peak should be observed at the retention time of analyte.	
<u>System Suitability:</u> Inject the standard solution in to the chromatograph using above chromatographic parameters and note the peak areas of eluting Peaks from the chromatographic report. The system is suitable for analysis, if and only if, The relative standard deviation of area of six replicate injections for all solvents is not more than 15.0% and Resolution between two peaks is not more than 1.5	

Standard testing procedure			Reference No.
<u>Injection sequence:</u>			
Sr. No.	Name of Injection	No. of Injection	
01.	Blank	01	
02.	Standard Solution	06	
03.	Sample solution	01	
<u>Calculation</u>			
Calculated the content of each residual solvent (in ppm) by using the following formula:			
$= \frac{r_U}{r_S} \times \frac{C_S}{C_U} \times 1000000$			
<p>r_U: Peak response of each solvent from the sample solution.</p> <p>r_S: Peak response of each solvent from the standard solution.</p> <p>C_S: Concentration of standard solution.</p> <p>C_U: Concentration of sample solution.</p>			