PHARMA DEVILS

QUALITY CONTROL DEPARTMENT

STANDARD OPERATING PROCEDURE	
Department: Quality Control	**SOP No.:**
Title: Operation and Calibration of Ultra-Violet Chamber	**Effective Date:**
Supersedes: Nil	**Review Date:**
Issue Date:	**Page No.:**

1.0 OBJECTIVE:

To lay down a procedure for Operating & Calibration of Ultra-Violet Chamber.

2.0 SCOPE:

This SOP is applicable for Operation and Calibration of Ultra-Violet Chamber in the Quality Control Department.

3.0 RESPONSIBILITY:

Officer, Executive - Quality Control Department

Head - Quality Control Department

4.0 DEFINITION(S):

NA

5.0 PROCEDURE:

Make: Camag, Model: LAAAG

5.1 Operation:

5.1.1 Ensure that instrument is clean and free from dust.

5.1.2 Place the developed TLC plate in the chamber.

5.1.3 Close the Chamber.

5.1.4 Select the desired wavelength by switching on the respective lamp (254nm, 365nm).

5.1.5 Observe the developed plate through the eye viewer.

5.1.6 Switch 'OFF' the illuminating lamp before removing the plate

5.1.7 Record the details in the equipments/instrument log book for results & breakdown.

5.2 Calibration:

5.2.1 Prepare 0.2% w/v solution of sodium salicylate in 95% ethanol (for 365 nm) and 0.04% solution of sodium salicylate (for 254 nm) in 95 % ethanol.

5.2.2 Apply both conc. (5 µl) on plate coated with silica gel G.

5.2.3 Operate the instrument as operating procedure.

5.2.4 Examine the spot in position normal to radiation.

5.2.5 The lamp should be capable of revealing without doubt a standard spot of sodium salicylate with a diameter of about 5 mm on a chromatographic plate coated with silica gel G.

5.2.6 Frequency – Quarterly

5.2.7 If instrument is out of calibration, affix "UNDER MAINTENANCE" label on the instrument and call for service engineer.

5.2.8 Fill the calibration status on metallic calibration label of the instrument, record the calibration results in annexure-I

5.2.9 Note calibration activity in the instrument log book

5.3 Cleaning:

Clean the Instrument properly with cotton cloth.

5.4 Precaution:

5.4.1 UV Radiations are harmful to eyes and skin therefore never looks directly at the lightened UV Lamp or tube.

5.4.2 Also never insert your hand or escape your body surface inside the UV chamber when the lamps are illuminated.

5.4.3 Do not rapidly turn /off the switch as it will shorten the life of the lamp.

6.0 ABBREVIATION(S):

QCD - Quality Control Department

SOP - Standard Operating Procedure

TLC - Thin layer chromatography

µl – Microlitre

7.0 REFERENCE(S):

IP-1996

8.0 ANNEXURE(S):

Annexure – I Calibration Record of Ultra violet Chamber

STANDARD OPERATING PROCEDURE	
Department: Quality Control	**SOP No.:**
Title: Operation and Calibration of Ultra-Violet Chamber	**Effective Date:**
Supersedes: Nil	**Review Date:**
Issue Date:	**Page No.:**

9.0 REVISION CARD:

S.No.	REVISION No.	REVISION DATE	DETAILS OF REVISION	REASON (S) FOR REVISION

STANDARD OPERATING PROCEDURE	
Department: Quality Control	**SOP No.:**
Title: Operation and Calibration of Ultra-Violet Chamber	**Effective Date:**
Supersedes: Nil	**Review Date:**
Issue Date:	**Page No.:**

ANNEXURE I

Calibration Record: Ultra Violet Chamber			
Location		**Model No.**	
Make	Camag	**Identification No.**	
Calibration Done On		**Calibration Due on**	
Reference SOP No.:			**Page No. : 4 of 1**

S.No.	Test	At nm	Observation
1.	0.2 % w/v solution of sodium salicylate in 95 % ethanol	365	
2.	0.04 % w/v solution of sodium salicylate in 95 % ethanol	254	
LIMIT:	The lamp should be capable of revealing clearly a standard spot of sodium salicylate with a diameter of about 5 mm on a chromatographic plate coated with silica gel G.		
Remarks: The Instrument Calibration **complies / Does Not Comply.**			

Calibrated By : **Date :**	**Checked By :** **Date :**