

Shri Manibhai Virani & Smt. Navalben Virani Science College Yogidham Gurukul, Kalawad Road, Rajkot – 360005, Gujarat, India		
Doc. no. VSC/CIF/SOP/004	Doc. name: Standard Operating Procedure for HPLC	Location : CIF Lab-111
Model : 1220 Infinity LC Sr.No : DECAH00217	Make: Agilent Technologies	ID no. VSC/CIF/004
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1. OBJECTIVE

To describe the procedure for operation and maintenance of HPLC

2. SCOPE

Applicable to HPLC system in the Central Instrumentation Facility (CIF) Lab

3. REFERENCE & ATTACHMENTS :

- 3.1 User's operating manual supplied by manufacturer.
- 3.2 Attachment – I Log book record.
- 3.3 Attachment –II Maintenance Log

4. RESPONSIBILITY

4.1 Head of Department

- 4.1.1 To ensure the implementation of this SOP.
- 4.1.2 To initiate repairs and to make alternative arrangements during the pendency of repair.

4.2 Application Chemist

- 4.2.1 To ensure proper documentation as per SOP.
- 4.2.2 To maintain the instrument and its accessories.
- 4.2.3 To inform about any failure of instrument or calibration failure to Head and to make a record in maintenance log.

5. PROCEDURE

- 5.1 Switch ON the HPLC and Fraction Collector respectively
- 5.2 Switch on the Computer and open the HPLC Online Software
- 5.3 Make sure the connection of HPLC and Fraction Collector with Software by Beep Sound
- 5.4 Make sure the Configuration of System components
- 5.5 Download the Instrumental Method and wait until the system getting ready
- 5.6 Prepare the batch and run the Sample for Analysis
- 5.7 Wait for the complete of analysis

- 5.8 Integrate the Chromatogram and Save
- 5.9 Close the software, Switch off the Fraction collector and then HPLC


6. MAINTRENANCE

- 6.1 Make sure the Column is connected well
- 6.2 Keep the instrument in a dust, vibrations, spatial noise and corrosive gases free environment
- 6.3 Wipe the instrument to make it dust free before operation
- 6.4 Do not turn off power supply to the main electronic of the instrument and pump at any time except under maintenance
- 6.5 Make sure the continuous supply of Mobile phase
- 6.6 Check for leaks, always after performing maintenance
- 6.7 Always perform blank before sample analysis
- 6.8 Prepare sufficient Mobile Phase as per sample
- 6.9 Use freshly prepare Mobile Phase
- 6.10 Use Fraction Collector for small fraction/short run time
- 6.11 Perform Blank after sample analysis, overnight out of usage of system
- 6.12 Set flow rate as per column specification

7. DISTRIBUTION OF SOP:

- Master copy (original): To be kept with Head of Department.
- Reference copy: To be kept with Application Chemist
- Reference copy: For display at instrument




Principal
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