Chapter 4

MATERIALS AND INSTRUMENTS USED
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4. MATERIALS AND INSTRUMENTS USED

4.1. Materials

4.1.1. Drug: Bosentan (Alphamed formulations, Hyderabad)

4.1.2 Polymers

- Hydroxy propyl methylcellulose (HPMC K15) (Drugs India, Hyderabad)
- Eudragit RSPO (Evonik, Hyderabad)
- Guar gum (SD Fine Chemicals, Boisar)
- Karaya gum (Drugs India, Hyderabad)
- Carbopol (Luzenac)
- Polyethylene oxide (The Dow Chemical Company)

4.1.3. Other Materials

- Aerosil (Drug India Laboratories, Hyderabad)
- Magnesium stearate (SD Fine Chemicals, Boisar)
- Lactose monohydrate (SD Fine Chemicals, Boisar)
- Sugar pellets (Drugs India, Hyderabad)
- Formaldehyde (SD Fine Chemicals, Boisar)
- Potassium permanganate (SD Fine Chemicals, Boisar)
- Cross carmalose (SD Fine Chemicals, Boisar)
- Hydrochloric acid IP (SD Fine Chemicals, Boisar)
- Polyvinyl chloride (SD Fine Chemicals, Boisar)
- Tween 80 (SD Fine Chemicals, Boisar)
- Disodium hydrogen phosphate (SD Fine Chemicals, Boisar)
- Potassium dihydrogen phosphate (SD Fine Chemicals, Boisar)
- Alcohol IP (SD Fine Chemicals, Boisar)
- Sodium chloride (SD Fine Chemicals, Boisar)
- Distilled water

4.2. Instruments

4.2.1. Major Instruments

- HPLC Agilent Isocratic LC-1220
- Schimadzu UV – Visible Spectrophotometer (UV1201)
- Digital Balance & Dhona 160D Electronic Balance
- Rotary Tablet Punching Machine (9 Station-Chamunda Pharma)
- 8 Basket Digital Dissolution Apparatus USP XXI Paddle (Electro Lab-Model EDT-08 Lx)
- FTIR – Model 2000 Perkin Elmer
- DSC – Model DSC-50 Shimadzu Automatic Analyzer
- SEM – JEOL JSM-630 J Scanning Electron Microscope

4.2.2. Other Instruments

- Monsanto Tablet Hardness Tester
- Screw Gauge (Thickness Tester)
- Roche Friabilator
- Electronic Balance
- Magnetic Stirrer, Remi Motor Equipments, Mumbai
- Try Drier, CISCO Scientific Industries, Mumbai
- Digital pH Meter, Elico II-22, Digisum Electronics, Hyderabad
- Coating Pan, Kalwaka, Mumbai