

## List of Materials, Equipments and Softwares

### List of Materials

Sr. No.	Name of Chemical	Source
1	Cromolyn Sodium	Entod Pharmaceuticals, Mumbai, India
2	Poly-(D,L-lactide-co-glycolide) 75:25; (MW:75–115 kDa) (PLGA)	Evonik Degussa India Pvt. Ltd., Mumbai, India
3	Chitosan (MW 50–1,000 kDa and Degree of deacetylation > 85 %)	Cognis gmbh, Germany
4	Poly-ε-caprolactone (MW: 70-90 kDa) (PCL)	Sigma Aldrich, USA
5	Soya lecithin	Himedia laboratories Pvt. Ltd., Mumbai, India
6	Glyceryl monostearate	Zydus Cadila Healthcare Ltd. Ahmedabad, India
7	Polyvinyl alcohol (MW:80-125 kDa) (PVA)	Himedia laboratories Pvt. Ltd., Mumbai, India
8	Fluorescein isothiocyanate (FITC)	Sigma Aldrich, USA
9	FITC-PLGA	Polyscitech, USA
10	Coumarin-6	Sigma Aldrich, USA
11	Ganciclovir	Ranbaxy, Gurgaon, India
12	Glacial acetic acid	SD Fine Chemicals Ltd., Mumbai, India
13	Dichloromethane	SD Fine Chemicals Ltd., Mumbai, India
14	Methanol	SD Fine Chemicals Ltd., Mumbai, India
15	Mannitol	Himedia laboratories Pvt. Ltd., Mumbai, India
16	Acetonitrile (HPLC-grade)	SD Fine Chemicals Ltd., Mumbai, India
17	Methanol (HPLC-grade)	SD Fine Chemicals Ltd., Mumbai, India
18	Diethyl ether	SD Fine Chemicals Ltd., Mumbai, India
19	Sodium chloride	SD Fine Chemicals Ltd., Mumbai, India
20	Sodium hydroxide	SD Fine Chemicals Ltd., Mumbai, India
21	Calcium chloride	SD Fine Chemicals Ltd., Mumbai, India

22	Potassium dihydrogen orthophosphate	SD Fine Chemicals Ltd., Mumbai, India
23	Potassium chloride	SD Fine Chemicals Ltd., Mumbai, India
24	Magnesium chloride	SD Fine Chemicals Ltd., Mumbai, India
25	(4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid ) (HEPES)	Himedia laboratories Pvt. Ltd., Mumbai, India
26	Heparin Sodium Injection	Biological E. Limited, Hyderabad, India
27	Glucose	Himedia laboratories Pvt. Ltd., Mumbai, India
28	Dimethyl sulphoxide (DMSO)	SD Fine Chemicals Ltd., Mumbai, India
29	Acetone	SD Fine Chemicals Ltd., Mumbai, India
30	EDTA	Sigma Aldrich, USA
31	Potassium bromide (KBr)	Himedia laboratories Pvt. Ltd., Mumbai, India
32	Indium	Sigma Aldrich, USA
33	Glycerol	Qualigens Chemicals, Mumbai, India
34	Ethanol	Merck Ltd., Mumbai, India
35	Formaldehyde	Merck Ltd., Mumbai, India
36	Sodium dihydrogen orthophosphate	SD Fine Chemicals Ltd., Mumbai, India
37	Hydrochloric acid	LOBA Chemie Pvt. Ltd., Mumbai, India
38	Orthophosphoric acid	Qualigens Fine Chemicals, Mumbai, India
39	Roswell Park Memorial Institute 1640 medium (RPM1640)	Himedia laboratories Pvt. Ltd., Mumbai, India
40	Metrizamide	Himedia laboratories Pvt. Ltd., Mumbai, India

### List of Equipments

Sr. No.	Name of Equipment	Manufacturer
1	Digital magnetic stirrer	IKA <sup>®</sup> , C-MAG, HS 7, Germany
2	Digital electronic balance	Shimadzu, Japan
3	Digital pH meter	IKON Instruments, New Delhi, India
4	Digital microscope	Zeiss, AXIO, Imager A1, Germany
5	DELSA <sup>™</sup> NANO C Particle size analyzer	Beckman Coulter, Inc., UK
6	Ultra probe sonicator	UP50H, Hielscher, USA
7	Fourier transform infrared spectrophotometer	FTIR 8400S system, Shimadzu, Japan
8	Differential scanning calorimeter	TGA/DSC-1, STAR <sup>®</sup> system, Mettler Toledo, Switzerland
9	Lyophilizer	Labconco, USA
10	Rotatory evaporator	IKA <sup>®</sup> RV10, Germany
11	Cooling centrifuge	RC 4100 F, Eltek, Mumbai, India
12	UV-Visible spectrophotometer	UV-Visible 1800, Shimadzu, Japan
13	High performance liquid chromatography (HPLC)	Shimadzu Corporation, Koyoto, Japan
14	Vacuum oven	Cintex, Mumbai, India
15	Powder X-Ray diffractometer	Rigaku, Japan
16	High resolution transmission electron microscope	TECHNAI-20G <sup>2</sup> ; FEI, Philips, Holland
17	Atomic force microscope	NT-MDT, Moscow, Russia
18	Confocal laser scanning microscope	LSM, 510 META, Carl Zeiss Inc, USA
19	Spectrofluorophotometer	RF-1501, Shimadzu, Japan
20	Bath sonicator	WUC 1.8L, Fisher Scientific, India
21	Vortex mixer	Fisher Scientific, India
22	Sonicator (Bath type)	Decibel Instruments, Chandigarh, India
23	Stability chamber	Narang Industries, Mumbai, India

24	Deep freezer	Sanyo VP, India
25	Micro centrifuge tubes	VOLEX Plasticwares, Italy
26	Rotary shaker	Khera Instruments Pvt. Ltd., Delhi, India
27	Micro pipettes	Thermo Scientific, USA
28	Eppendorf tubes	Eppendorf Corp., NY, USA
29	Digital thermometer	Colorcon India Ltd. India
30	Syringe filter (0.22 $\mu\text{m}$ and 0.45 $\mu\text{m}$ )	Millipore Corporation, MA, USA
31	Cryomicrotome	Leica CM1850, Leica Microsystem srl, Milan, Italy
32	Dialysis membrane (MWCO 12-14 kDa)	Himedia Laboratories Pvt. Ltd., Mumbai, India

### List of Softwares

<b>Sr. No.</b>	<b>Name of Software</b>	<b>Developer</b>
1	Microsoft Office 2010	Microsoft Corp., USA
2	Adobe Acrobat Reader XI & Photoshop CS5	Adobe Systems Incorporated, San Jose, CA, USA
3	Design Expert <sup>®</sup>	Version 8.0.6.1, Stat-Ease Inc., Minneapolis, USA
4	Winnonlin <sup>®</sup>	Version 6.1, Pharsight Corporation, Mountain View, CA
5	OriginPro	Version 8.1, Origin Lab Corporation, MA USA
6	Kinetic	Version 5.1 Trial, Thermo Fisher Scientific, Massachusetts, USA
7	GraphPad Prism	Version 5.03, GraphPad Software Inc., CA, USA