

## GMP Equipment List

\*\*Revised 12 MAR 2009\*\*

<i>Type</i>	<i>Manufacturer</i>
Accelerated Weathering Device (Atlas Suntest)	Atlas Electric Devices Company
Accusterilizer	VWR
Atomic Absorption Spectrophotometer	Perkin Elmer
Automated Colony Counting & Measuring System	Synoptics
Automated Solvent Extractor	Dionex
Breath Simulator	MSP
Capillary Electrophoresis	Agilent, Beckman Coulter
Cascade Impactor	Andersen Instruments Inc., Copley, Delron
Cascade Impactor Preseparator	Andersen Instruments Inc., Copley
Centrifugal Force Evaporator	Labconco
Centrifuge	Eppendorf, Beckman-Coulter, Sorvall, Eppendorf, Fisher Scientific, VWR
Charged Aerosol Detector	ESA Biosciences, Inc.
CO2 Incubator	Thermo Electron
Coagulation Analyzer	Beckman Coulter, Diagnostico Stago, Instrumentation Laboratories
Colorimeter	Brinkmann
Cryogenic unit	Forma Scientific
Darkfield Colony Counter	Leica, Reichert Quebec Darkfield
Densitometer	Amersham BioSciences, Biorad, Umax
Density Meter	Anton Paar
Differential Scanning Calorimeter	TA Instruments
Disintegration Bath	Vankel
Dissolution System, Apparatus I and II	Distek, Vankel, and Varian
Dissolution System, Apparatus III	Varian
Dissolution System, Apparatus IV	Sotax
Dissolved Oxygen Meter	VWR
Dot Blot Microfiltration Apparatus Manifold	Biorad
Electrophoresis Power Supply	Amersham BioSciences, Bio Rad, McPherson
Elemental Analyzer	Elementar
Epifluorescence Microscope	Leitz
Flame Photometer	Instrumentation Laboratory
Fluorescence Imaging System	BioRad Laboratories
Freeze Dryer	Labconco
Friabilator	Vankel
FTIR Spectrometer (MIR and NIR)	Bruker
Gas Chromatograph (FID, TCD, uECD, FPD detectors, Split/Splitless, Cool and Column, Packed)	Agilent
GC/MS (CI and EI detectors)	Agilent
Gel Electrophoresis Tank	Amersham BioSciences, Bio Rad, Hoeter Scientific, Invitrogen, Pharma Biotech
Gel Electrophoresis Unit	Amersham Pharmacia Biotech
Hardness Tester	Vankel; Vector Corporation

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Head Space Analyzer	Agilent
HPLC System	Agilent, Hitachi, Perkin Elmer, Shimadzu, Waters
Hydrolysis / Derivatization Station	Eldex
Imaged Capillary Electrophoresis (iCE Analyzer)	Convergent Bioscience
Incubator	Fischer Isotemp, Fisher, Precision, Thermo Electron; VWR
Inductively Coupled (Argon) Plasma Mass Spectrometer	Perkin Elmer, Thermo Elemental
Ion Chromatograph	Dionex
Isoelectric Focusing Unit	Amersham BioSciences, Bio Rad
Isolator	CPS Barrier Systems
Karl Fischer Coulometer	Aquastar, EM Science, Brinkman
Karl Fischer Coulometer with Headspace Oven attachment	Mettler Toledo, Brinkman
Karl Fischer Volumetric Titrator	Mettler
Karl Fischer Volumetric Titrator with Oven attachment	Mettler Toledo
Laser Scattering Particle Size Distribution Analyzer	Horiba, Malvern, Particle Sizing Systems, Sympatec
LC/MS/MS (4000 Q Trap)	Applied Biosystems
LC/MS/MS (API 2000, API 3000)	Sciex
LC/MS/MS (Waters Premier Q-TOF)	Waters
Light Box	Eisai Machinery, Fisher Scientific, Gretag Macbeth, Scienceware, VWR
Light Scattering Detector	Polymer Laboratories, Shimadzu, Waters
Liquid Particle Counting System	Beckman Coulter, Hach Ultra Analytics, HIAC/Royco
Liquid Scintillation Counter	Beckman Coulter
Marple Miller Impactor	MSP Corporation
Melting Point Apparatus	Mettler Toledo, Electrothermal
Metered Dose Inhaler Automated Bursting Station	Innova Systems, Inc.
Micron Air Jet Sieve	Hosokawa
Microscope	Leitz, Nikon, Olympus
Microwave Extractor	CEM Corporation
Multi-Stage Liquid Impinger	Copley Instruments
Nasal Spray Dose Weight Collection Station	InnovaSystems, Inc.
Nasal Spray Pump Actuation Station	Innova Systems
Next Generation Impactor	MSP Corporation
Next Generation Impactor Preseparator	MSP Corporation
NSP Spray View System	Imagetherm Eng., Innova Systems
Osmometer	Advanced Instruments
Oxygen Analyzer	Mocon, Orbisphere, PBI Dansensor
Package Leak Tester	Takachiho Seiki

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Particle Size Analysis Research Station	Clemex PS3, Leica/Clemex
PCR System	Applied Biosystems
Pipette Calibration Balance, Multi-Channel	Mettler Toledo
Pipette Calibration Balance, Single Channel	Mettler Toledo
Plate Washer	Bio-Tek
Polarimeter	Rudolph
Post-Column Reactor	Pickering Laboratories
Pressure Vessel	Pall
Pyrolyzer	Frontier Lab
Radiochromatography Detector (beta-Ram 4B)	IN/US Systems
Refractometer	Bellingham and Stanley
Refractometer, Hand-held	Reichert
Ribo Printer	Dupont Qualicon
Riffler	Gilson Company, Inc.
Ro-Tap-Analyzer	W.S. Tyler
Sector PR 400 Plate Reader	Meso Scale Reader
Single Stage Impinger	Copley
Spectrofluorometer	McPherson
Spectrophotometer	Agilent, ATI Unicam, Dr. Lange, HunterLab, Molecular Devices, Nicolet, Tecan, Thermo Electron, Varian
Tapped Density Tester	Vankel
Thermogravimetric Analyzer	TA Instruments
Titration	Brinkman, Mettler Toledo, Metrohm
Torque Tester	Secure Pak
Total Organic Carbon Analyzer	Mettler Toledo, Shimadzu
Traceable Photometer	VWR
Turbidimeter	Hach
UPLC System	Agilent, Waters
UPLC/MS/MS (Waters TQD)	Waters
UV-VIS Spectrophotometer	Agilent, Molecular Devices, Perkin Elmer
Viscometer	Brookfield, Haake
Water Activity Meter	Decagon Devices
Water Vapor Sorption Analyzer	VTI
Western Blot Transfer Tank	Bio Rad
Wyatt Mini Dawn with Optilab DSP	Wyatt Technology Corporation
Wyatt Dawn EOS with Optilab rEX and Quasi Elastic Light Scattering Detector	Wyatt Technology Corporation
X-Ray Diffractometer	Bruker-AXS