

As the need for more sustainable laboratory products increases, the range of eco-friendly merchandise continues to expand. This list outlines alternative options to conventional laboratory products and equipment, highlighting the advantages they offer to both users and the environment.

WATER REDUCTION		
Product	Vendor	Benefit
Water Purification Condensate Recirculating System	Caron <u>VWR</u>	Water reduction through recirculation
Water Bath Beads LabArmor™ Bath Beads	Sheldon Manufacturing <u>VWR</u>	Reduce water consumption
<u>Laboratory Filtration Systems</u>	EMD Millipore	Eliminate the use of water aspirators
EZ-Fit® Filter Holder Manifolds	EMD Millipore	Eliminate the use of water aspirators
CO2 Incubator Reach-in Incubator with gVAPOR™ temperature control	Caron <u>VWR</u>	gVAPOR™ - Delivering humidity vapor on an as-needed basis without wasting energy or heat
Air Condenser FINDENSER	Heidolph <u>VWR</u>	Reduce water use in air condensing
1225 Sampling Manifold for smaller volumes	EMD Millipore	Simultaneously filter up to 12 samples

ENERGY EFFICIENCY		
Product	Manufacturer - Distributor	Benefit
Biosafety Cabinet Purifier Logic®	Labconco <u>VWR</u>	Idles blower when sash is fully closed
CO2 Incubator Reach-in Incubator with gVAPOR™ temperature control		gVAPOR™ - Delivering humidity vapor on an as-needed basis without wasting energy or heat
Environmental Test Chamber Benchtop and Large Capacity	Caron <u>VWR</u>	Humidity provided as needed without wasting energy or producing heat
Refrigeration on Demand (efficient management of power and saves electricity)	In fume hood blower	Intelli-Sense™ Variable Speed Blowers
LED lights for labs LabLink LED LabLight	PG LifeLink <u>VWR</u>	Energy Star rated components, efficient management of heat generated by high-power LEDs, 50,000 hours LED service life
Local Area Vacuum Network Vacuu-Lan® by Vacuubrand	Lab Synergy <u>VWR</u>	Pumps operate only on demand, conserving up to 90% of the energy that may be needed



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		for central vacuum supply. High- performance vacuum removes the need for dedicated pumps.	
Microtomes Cryostar™ NX70	Thermo Scientific VWR	Rapid response cooling system, precise temperature control and less energy consumption, utilizes low energy LED lighting	
Panasonic VIP Eco Natural Refrigerant ULT Freezer	Panasonic <u>VWR</u>	The freezer operates on natural refrigerants.	
Refrigerated CO2 Incubator Reach-in incubator with gROD™ temperature control	Caron <u>VWR</u>	gROD™ Refrigeration on Demand - delivering refrigeration on an as-needed basis, efficient power management and consumption	
Refrigerated Incubator B.O.D. Thermoelectric Cooled	Sheldon Manufacturing <u>VWR</u>	Units use 78% less power than alternative models and reduce room air conditioning loads by 75%.	
Spectrometer Spectrum Two™ FT-IR	Perkin Elmer <u>VWR</u>	76% reduction in energy use compared to the PerkinElmer RX spectrometer, 75% (by weight) of unit can be recycled	
Ultra-Low Temperature Freezers CryoCube High Efficiency	Eppendorf <u>VWR</u>	Optimal air flow to prevent over-heating and features that provide tight control of the temperature	
Ultra-Low Temperature Upright Freezers Stirling Ultracold SU780XLE	Stirling Ultracold <u>VWR</u>	Low Energy Consumption, Large Storage Capacity per Sq Ft. of floor space. Plugs into any outlet. High long-term reliability.	
Ultra-Low Temperature Upright Freezers Thermo TSX®	Thermo Scientific <u>VWR</u>	Features high energy efficiency and provides tight control of temperature	
Ultracentrifuge <u>Optima XPN-100</u> <u>Ultracentrifuge</u>	Beckman Coulter VWR	Regenerative braking returns energy to local circuit. Highly efficient thermoelectric cooling results in lower power consumption. Minimized energy usage when idling.	
VWR Fridges and Freezers	VWR	The VWR line of refrigerators and freezers operate with natural refrigerants.	



HAZARDOUS WASTE MINIMIZATION		
Product	Vendor	Benefit
Autoclave Indicator Tape AUTOPC (lead-free)	Micronova <u>VWR</u>	Lead-free autoclave tape
Autoclave Tape	<u>VWR</u>	Lead-free, latex-free autoclave tape
Blue Light DNA Dye EZ-Vision® In-Gel Solution	Amresco <u>VWR</u>	Safe chemical substitutions, non-mutagenic, non-toxic
Detergents: <u>Alconox PCC-54</u> <u>RBS35</u>	Alconox (VWR) Thermo Scientific (<u>VWR</u>)	Biodegradable, phosphate-free, and/or less hazardous
DNA MW Markers Ready Ladder™ or EZ-Vision®	Amresco <u>VWR</u>	Safe chemical substitutions
Dye-as-Loading Buffer EZ- Vision®	Amresco <u>VWR</u>	Safe chemical substitutions, non-mutagenic, non-toxic
Green Electrodes InLab Series®	Mettler Toledo <u>VWR</u>	Comply with RoHS and WEEE standards
Greener Cleaning Products: MegaClean: All-purpose cleaner NovaClean: Lab/Glass cleaner	Micronova <u>VWR</u>	Biodegradable, non-flammable
ImageQuant™ <u>CCD Camera</u> <u>Systems</u>	GE HealthCare VWR	Replaces wet processes
Karl Fischer reagents Aquastar® Pyridine-free	EMD <u>VWR</u>	Pyridine free
Nucleic Acid Gel Stains GelRed™ and GelGreen™	Biotium <u>VWR</u>	Substitute for hazardous Ethidium Bromide
Partial-Immersion Thermometers Easy-Read® Certified Liquid In Glass Thermometer	HB Instrument Company <u>VWR</u>	Non-toxic, non-hazardous components
Protein Stain Pierce GelCode® Blue Stain Reagent	Thermo Scientific <u>VWR</u>	Safe chemical substitutions, reduces reagent cost and solvent disposal
qPCR Mastermix EvaGreen®	Biotium <u>VWR</u>	Substitute for hazardous Ethidium Bromide
RNA Gel Kit Formaldehyde-Free Kit	Amresco <u>VWR</u>	Formaldehyde free



HAZARDOUS WASTE MINIMIZATION		
Product	Vendor	Benefit
Spill Kit Supplies: <u>Absorbent</u> <u>Mats Spill Kits DrainBlockers</u>	New Pig <u>VWR</u>	Sustainable options for spill kits
Thermometers Liquid-in-glass, non-mercury	<u>VWR</u>	Mercury-free thermometer, with non-toxic alternative
Total RNA Purification Kit Phenol-free Purification Kit	Amresco <u>VWR</u>	Phenol Free
Vacuum Pumps LABOPORT®	KNF Neuberger VWR	Oil-free
AQUACOUNTER® automatic Coulometric Karl Fischer Tirator	Hitachi High-Tech	Safe chemical substitutions (less reagent and waste)
AquaMetric® Pyridine-free volumetric Karl Fischer reagents	<u>Panreac</u>	Pyridine free
Coomassie Stain Bio-safe (non- hazardous)	<u>Bio-rad</u>	Safe chemical substitution
Formalin alternative: Glyo-fixx®	ThermoFisher Scientific	Glyo-Fixx is a non-carcinogenic, non- sensitizing, and environmentally friendly substitute for formalin
LabSafe GEL Blue™ Electrophoresis Gel Stain	G-Biosciences <u>VWR</u>	Avoids the use of methanol, acetic acid, or other toxic agents
QC Eco-Green Heat Transfer Fluid	<u>Chemical.net</u>	Eco-green liquid for use in heat transfer equipment
SYBR® Safe DNA Gel Stain	Thermo Fisher Scientific	Substitute for hazardous Ethidium Bromide



SOLID WASTE REDUCTION			
Product	Vendor	Benefit	
96-Well Microplates Half-Area Microplates	Greiner Bio-One <u>VWR</u>	Uses less plastic	
ART Racks for Filter Tips Reload System	Thermo Scientific <u>VWR</u>	Uses less plastic	
Automated Reagent Dispenser Multidrop™ Combi	Thermo Scientific VWR	Reduced reagent cost	
Centrifuge Tubes VWR® High- Performance tubes	<u>VWR</u>	Reusable Racks for 15mL and 50mL, uses less plastic	
CO2 and Temperature Monitoring Systems	<u>VWR</u>	Paperless CO2 and temperature tracking systems	
Pipet Tip Box Recycling TerraCycle®	<u>VWR</u>	Recycling program to reduce landfill waste	
Pipet Tip Refill System Biotix Tip Eject™	Biotix <u>VWR</u>	Uses less plastic	
Pipet Tip Refill System Neptune™ ESP	Biotix <u>VWR</u>	Uses less plastic	
Pipet Tip Refill System VWR® Next Generation	<u>VWR</u>	Use less plastic, reduced and recycled packaging	
Pipet tips – Bulk and Racked Neptune™	Biotix <u>VWR</u>	Uses less plastic	
Pipet Tips – Bulk, racked and reload system	Biohit Family Sartorius <u>VWR</u>	100% recyclable trays and racks, uses less plastic	
Syringe Filters Acrodisc® PSF Syringe Filters	Pall <u>VWR</u>	Uses less plastic	
Tissue Processing and Stains	Thermo Scientific VWR	Packaging uses less plastic	
Vacuum Filtration Devices VacuCap®	Pall <u>VWR</u>	Little plastic waste, no contamination, refilling of reservoir	
Weighing boat holders ErgoClips®	Mettler Toledo <u>VWR</u>	No need for weighing paper	