

Burdick & Jackson®

# LabReady® Blends

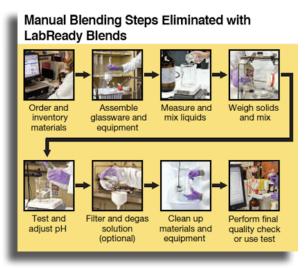
# Accelerate Productivity, Reduce Chemical Inventory, Improve Lab Safety & Lower Chemical Costs

How can your laboratory accelerate productivity on a slimmer budget, reduce chemical inventories and enhance lab safety – all at the same time? The answer can be found with Honeywell Burdick & Jackson® LabReady® Blends – highly customizable blends of high-purity solvents, reagents and buffers that are produced to your precise specifications, and offer the flexibility you require. By eliminating the need for manual blending, your laboratory can redeploy resources to more value-added activities that help it reach its scientific and technical goals. You also benefit from eliminating the waste that can result from formulation errors, and reduce chemical handling for a much safer work environment.

Honey well
Brdick & Jackson

For more than five decades, Burdick & Jackson has made the lives of lab managers and scientists easier with innovative, high-purity

products and packaging solutions. Burdick & Jackson scientists and engineers have developed LabReady Blends to deliver complex blend formulations with the same purity and consistency as our neat solvents. Our proprietary closed-loop manufacturing system blends solvents and other components in a fullysealed environment, helping to ensure lot-to-lot consistency, minimizing contamination risk and accelerating your lab's productivity.



#### **Save Time**

From the skilled tasks of weighing out chemicals and pH buffering, to the more mundane jobs of retrieving chemicals from storage and washing dirty glassware, manual blending consumes large amounts of your scientists' and technicians' time. Data shows that the average lab can spend up to 8.5 hours each week manually blending laboratory chemicals. LabReady Blends eliminate all of the tasks in your lab associated with preparing chemical blends. Documentation of blend preparation is simplified as well, because each blend is delivered with a certificate of analysis that provides an extra assurance of quality.

#### **Reduce Waste**

Preparing blends in the lab consists of many steps, and with very low tolerances for human error, even the occasional mistake may result in the disposal of an entire batch of material. Not only is the material wasted, but because of the hazardous nature of these products, the cost of disposal can be high. Trust Burdick & Jackson to handle your blend preparation and cut the high cost of disposing out-of-specification chemical blends while sparing your chemical inventories.

## Sample Cost-Benefit Analysis

Cost Component of Blend Preparation	Prepared in-house	Purchased LabReady Blend
Raw materials: (~1,000 liters / year)	\$29,000	\$ 33,350
Labor to prepare blend: (415 hours / year at \$25 per hour)	\$10,375	\$ 0
Cost of formulation errors (assumes 5% loss rate)		
Raw materials for reformulation:	\$ 1,450	\$ 0
Labor to reblend discarded blends: (20 hours at \$25 per hour)	\$ 519	\$ 0
Waste disposal: (\$2.00 / liter for hazardous waste)	\$ 100	\$ 0
Total annual blending costs:	\$ 41,444	\$ 33,350
Cost saving with LabReady Blends:		20%
Annual productivity gained:		24%

Example: Mobile phase for testing warfarin: 27.2 grams of potassium phosphate and 0.2N sodium hydroxide in water with a pH of 7.4 using phosphoric acid

#### Comparison of Analysis Quality Manual Blend 100 90 -80 9-peptide resolution 70 with 0.06% formic acid Relative Abundance 60 50 40 -30 -1,2 20 3 10 20 Due to simple human error, one lab attempting to produce 0.1% formic acid produced a lower-than-intended 0.06% formic acid concentration, resulting in atypical separation. LabReady Blends 100 -9-peptide resolution 90 with 0.1% formic acid 80 70 Relative Abundance 60 50 40 30 20 10 10 15 20 35 Using an accurate 0.1% formic acid concentration, the Honeywell LabReady® blend produced the expected, accurate separation results.

## **Improve Consistency and Quality**

LabReady Blends are formulated using Burdick & Jackson's proprietary, closed-loop blending technology, which dramatically reduces the contamination and exposure that is common with blending by hand. It also helps to eliminate variation, which allows your blends to be as precise as possible – batch after batch, and lot after lot. As required by customer specifications, LabReady Blends are tested to meet isocratic and gradient HPLC requirements, as well as most LC-MS requirements.

## Flexibility and Precision of LabReady Blends

Type of Component	Available in LabReady Blends	Formulation Tolerance
Solvent, aqueous and organic	✓	± 1.0%
Salt, organic and inorganic	✓	± 10% *
Acid and base	✓	± 10% *
pH buffer	✓	± 0.1

\* Based on concentrations less than 1% of the final blend
Note: All components are available in varying grades of purity, from reagent or
ACS general use to higher LC-MS grades, with varying grades in-between.
Component grades are determined based on the application and/or customer specifications.

## **Enhance Safety**

While LabReady Blends eliminate the costs and time associated with manual blending, they also remove the safety hazards associated with manual blending in your laboratory. With fewer materials and less preparation required, LabReady Blends help you reduce many of the risks associated with the storing, handling, blending and disposing of hazardous solvents, acids and other chemicals.

### MG Scientific: Your single source distribution and inventory management option

As a distributor of the Burdick & Jackson line of chemical solvents and chromatography products, MG Scientific works in partnership with Honeywell to engineer an uninterrupted supply chain. Through the MG Scientific stock reserve program, we ensure that chemicals you need to support critical operations are always available, never back ordered and shipped within 24 hours of order receipt. MG Scientific orchestrates lot reserves for client approved chemicals to maintain product consistency and minimize laboratory time dedicated to lot approval. We also eliminate the burden of lot and expiration date tracking and manage all documentation to include, Certificates of Analysis, Certificates of Conformance, and Certificates of Sterility through our proprietary system DataTRAK. MG Scientific helps maintain your compliance records and organizes all required documentation into one easy-to-use system sufficient for audit. To learn more about how MG Scientific can assist your company with chemical selection, packaging and deliver options, Contact Us at 1-800-343-8338.