

Honeywell Burdick & Jackson® LabReady® Solvent Blends

isn't it time to rethink solvent blending?



STANDARD AND CUSTOM BLENDS FROM AN INDUSTRY PIONEER IN HIGH PURITY SOLVENTS

Honeywell LabReady® solvent blends from Burdick & Jackson® were created to meet a growing demand for products and services that deliver greater efficiency, accuracy and safety to 21st century laboratories.

High-volume blends. Custom blends made to your specifications. Our blends are produced using Honeywell's proprietary, closed-loop technology ensuring ultra-consistent, ultra-pure HPLC and LC-MS grade blends delivered when and how you need them.



If it's time to rethink solvent blending in your lab—to liberate your lab from the higher costs and inefficiencies of in-house blending—Honeywell LabReady solvent blends are here.

APPLICABLE INDUSTRIES

Honeywell LabReady solvent blends save time for analytical labs in these industries:

- Pharmaceutical
- Food
- Industrial
- Biotechnology
- Petrochemical
- Academic
- Chemical
- Environmental
- Research

PURITY SPECIFICATIONS

Typical purity specifications for LabReady solvent blends

HPLC Grade	No UV absorbing impurities
LC-MS	No high M.W. compounds Low background noise
Residue	<1mg/L
Color (APHA)	<10
UV-Vis	No UV absorbing impurities
Tolerances	± 1% organic and aqueous ± 10% acid (0.1% TFA = 0.09% - 0.11%)

Consult your local area manager to discuss customized specifications.

IMPROVED EFFICIENCY

Do more with less. And do it *better*. We've blended those two advantages to create a simple solution for improving efficiency and reducing overhead costs in your lab—without compromising the quality and accuracy of your results.

A solution that liberates your staff from spending their valuable time mixing and blending solvents so they can focus instead on *your core business*.

A solution with clear benefits to your bottom line:

Example: Estimated Annual Cost Comparison 99.9% Acetonitrile + 0.1% TFA solvent blend

	In-house solvent blends	LabReady Solvent Blends
Raw materials (~1,000 liters/year)	\$7,100	\$8,100
Discarded out-of-spec blends (Assumes 5% loss/year)	\$350	\$0
Average annual labor costs for:		
• Blending solvents (~ 120 hrs/year, \$20/hr)	\$2,400	\$0
• Re-blending due to out-of-spec blends (~ 15 hrs/year, \$20/hr)	\$300	\$0
TOTAL ANNUAL COSTS (This solvent blend only)	\$10,150	\$8,100

Cost savings: more than 20%

Regardless of size, labs that blend solvents in house must also invest in the labor costs for blending them—an investment that can be wasted when out-of-spec blends result in re-blending. In this example, a lab could reduce these costs by more than 20% by outsourcing the blending process to the experts at Honeywell Burdick & Jackson®

What's more, savings will only increase by factoring in annual losses in staff productivity, as well as costs for disposing of expired solvent blends and additional safety measures required for in-house blending.

ENHANCED SAFETY

Made-to-order. Ready-to-use.

Because the LabReady process blends solvents and acids you need, your lab staff doesn't have to.

Whether you need standard blends or custom blends, Honeywell LabReady solvent blends help you reduce many of the risks associated with storing, blending and disposing of hazardous solvents and acids.

UNMATCHED QUALITY AND PRECISION FOR HPLC AND LC-MS APPLICATIONS

Certified quality. Reliable precision. We blend those two attributes into every high purity product we deliver—standard and custom blends alike.

Our proprietary, closed-loop blending technology:

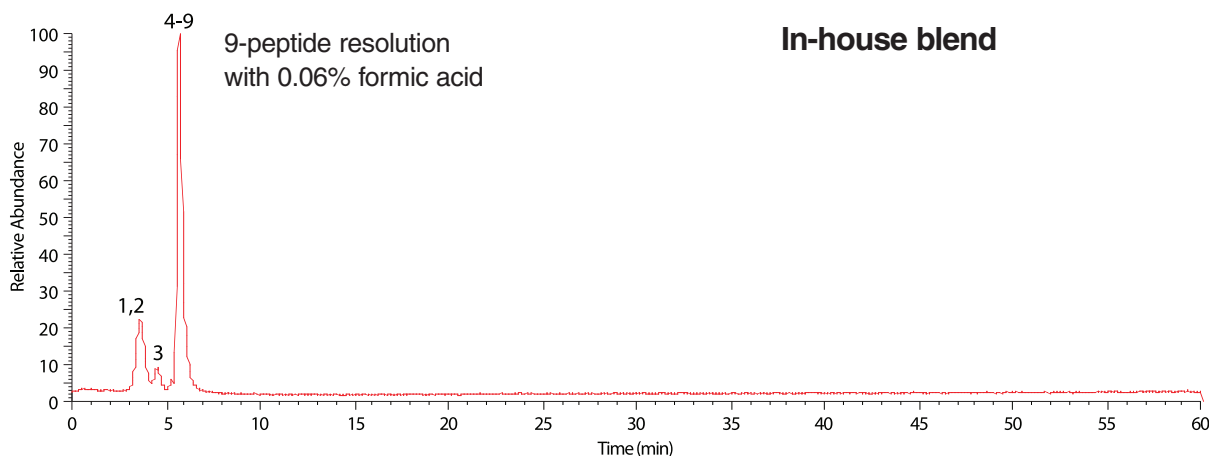
- Liberates you from concerns about contamination or exposure that can occur when you blend solvents in-house
- Minimizes batch-to-batch and lot-to-lot variation
- Meets isocratic and gradient HPLC as well as most LC-MS requirements

All Honeywell Burdick & Jackson® products are manufactured in facilities with an ISO 9001-certified quality system to ensure optimum quality and uniformity. Proprietary packaging techniques maintain this quality and uniformity from point of manufacture to point of use.

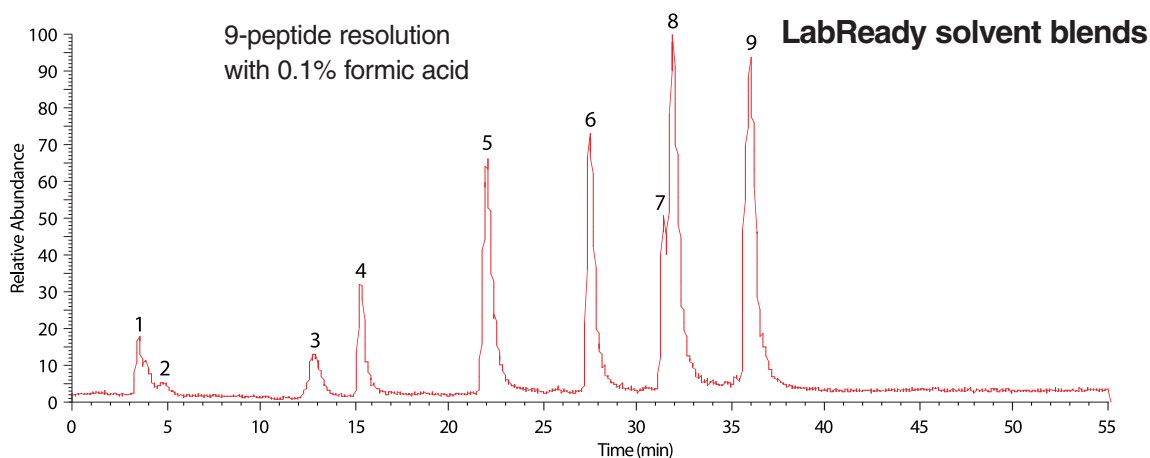
All products are accompanied by a certificate of analysis which ensures our products meet customer requirements—and helps our customers simplify regulatory documentation.

The results of this commitment to delivering superior quality are easy to see:

When solvent blends are imprecise, analysis suffers



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.



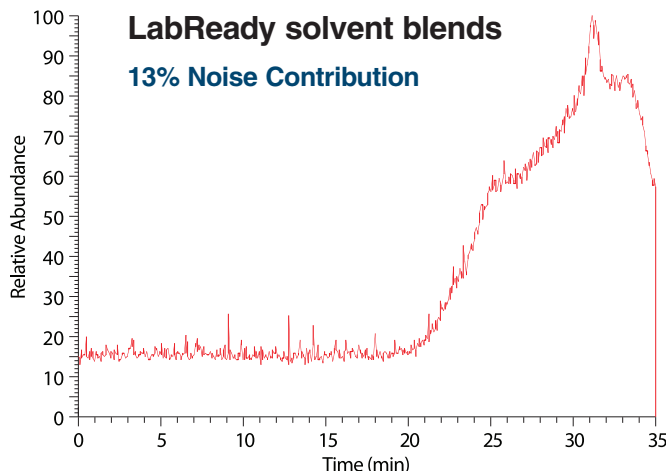
Using an accurate 0.1% formic acid concentration, the Honeywell LabReady® solvent blends produced the expected, accurate separation results.

Nine-peptide mix used in analysis:

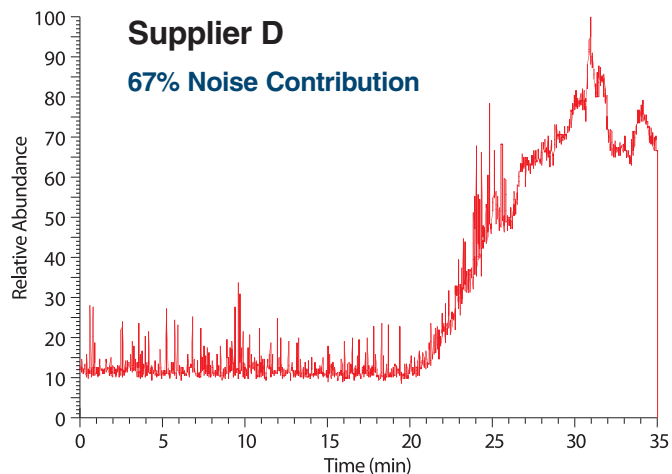
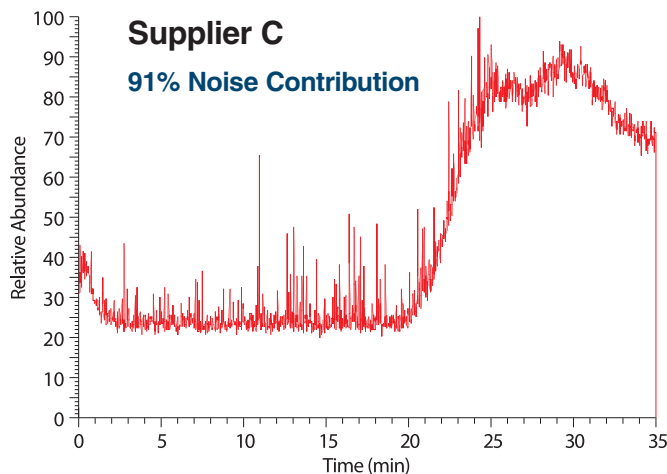
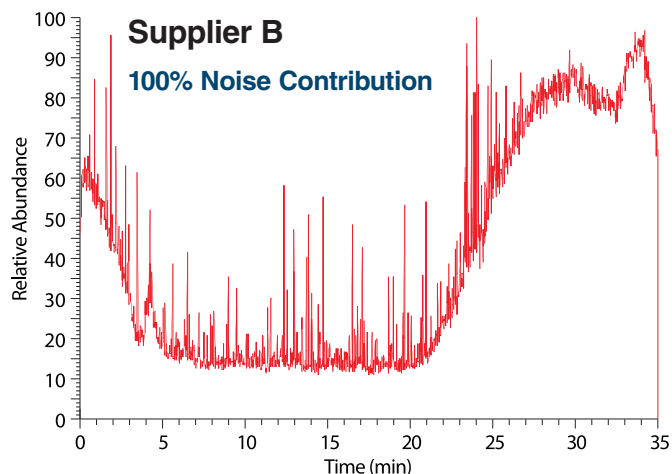
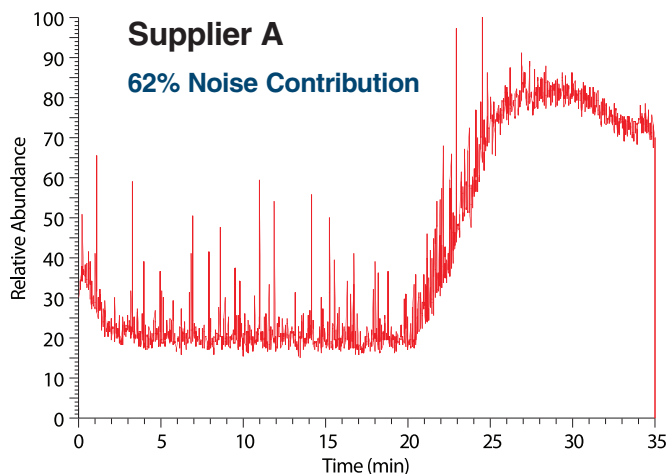
1. (Arg-8)-Vasopressin CYFQNCPRG-amide:disulfide
 2. Oxytocin: CYIQNCPLG-amide
 3. Bradykinin- Fragment 1-5: RPPGF
 4. Luteinizing Hormone Releasing Hormone: pEHWSYGLRPG-amide
 5. Met-enkephalin: YGGFM
 6. Bradykinin: RPPGFSPFR
 7. Substance P: RPKPQQFFGLM-amide
 8. Leu-enkephalin: YGGFL
 9. Bombesin: pEQRLGNQWAVGHLM-amide
- ** pE= pyroglutamate

Method Run Parameters:

HPLC conditions at 0 min 92% C (0.1% Formic Water); at 45 min 30% A (0.1% Formic in Acetonitrile); at 50 min 92% C, hold till 60 min.
Flow rate = 0.10 mL/min. 150 X 2.0 mm id with 3u C18 packing 110A
Mass Spec Condition: Heated Capillary Temperature: 250 C,
m/z range = 300-2000 amu, ESI voltage = 4.5 kV



In an LC-MS study of common commercially available solvent blends, a wide variation of noise levels was observed. LabReady Solvent Blends showed significantly reduced chemical noise signatures compared to the competition. Lower chemical or background noise levels increase instrument sensitivity, allowing greater testing accuracy and less rework.



Method Run Parameters:

At 0 min 90% C (0.1% TFA Water) hold till 10 min; at 20 min 90% A (0.1% TFA Acetonitrile), hold till 25 min; at 30 min 90% C, hold till 35 min.
Flow rate = 0.15 mL/min. 150 X 2.0 mm id with 3u C18 packing 110A
Mass Spec Condition: Heated Capillary Temperature: 250 C, m/z range = 50-650 amu, ESI voltage = 4.5 kV

BLENDS MODIFIED BY AN ACID OR A BASE

Family	Description	Package Options				
		2.5L	4L	20L NP	20L NS	200L
462	0.1% Acetic Acid in Acetonitrile (v/v)		Standard	Standard		Request
832	0.1% Acetic Acid in 70% Acetonitrile / 30% Water (v/v)	Request				
464	0.1% Acetic Acid in Methanol (v/v)	Request	Standard	Standard		
467	0.1% Acetic Acid in Water (v/v)		Standard	Standard		Request
594	0.1% Acetic Acid in 95% Water / 5% Acetonitrile (v/v)					Request
810	3% Acetic Acid / 69% Water / 28% Methanol (v/v)		Standard			
426	5% Acetic Acid / 95% Methanol (v/v)		Standard			
584	10% Acetic Acid in Water (v/v)	Request				
473	0.1% Ammonium Hydroxide in Acetonitrile (v/v)		Standard			Request
829	0.1% Ammonium Hydroxide in 95% Acetonitrile / 5% Water (v/v)					Standard
591	0.1% Ammonium Hydroxide in 90% DCM / 10% Methanol (v/v)		Request	Request		
554	0.1% Ammonium Hydroxide in Methanol (v/v)					Request
472	0.1% Ammonium Hydroxide in Water (v/v)		Standard			
596	1% Ammonium Hydroxide in Acetonitrile (v/v)					Request
471	1% Ammonium Hydroxide in 90% DCM / 10% Methanol (v/v)		Standard			
595	1% Ammonium Hydroxide in Water (v/v)					Request
805	0.2% 1,2 Diethylamine in Acetonitrile (v/v)					Standard
549	0.2% 1,2 Diethylamine in Methanol (v/v)		Standard			Standard
806	0.2% 1,2 Diethylamine in Water (v/v)					Standard
461	0.05% Formic Acid in Acetonitrile (v/v)		Standard	Standard		
LC875	0.05% Formic Acid in 95% Acetonitrile / 5% Water (v/v)	Request				
463	0.05% Formic Acid in Water (v/v)		Standard	Standard		
LC463	0.05% Formic Acid in Water (v/v)	Request				
441	0.1% Formic Acid in Acetonitrile (v/v)	Request	Standard	Standard		Request
LC441	0.1% Formic Acid in Acetonitrile (v/v)	Standard	Request			
497	0.1% Formic Acid in 98% Acetonitrile / 2% Water (v/v)					Request
LC599	0.1% Formic Acid in 95% Acetonitrile / 5% Water (v/v)	Standard	Request			
571	0.1% Formic Acid in 90% Acetonitrile / 10% Water (v/v)		Request			
LC571	0.1% Formic Acid in 90% Acetonitrile / 10% Water (v/v)	Standard	Request			
445	0.1% Formic Acid in Methanol (v/v)		Request	Request		
LC445	0.1% Formic Acid in Methanol (v/v)	Request				
452	0.1% Formic Acid in Water (v/v)	Request	Standard	Standard		Request
LC452	0.1% Formic Acid in Water (v/v)	Standard	Request			
583	0.1% Formic Acid in 95% Water / 5% Acetonitrile (v/v)			Request	Request	
LC583	0.1% Formic Acid in 95% Water / 5% Acetonitrile (v/v)	Standard	Request			
LC598	0.1% Formic Acid in 90% Water / 10% Acetonitrile (v/v)	Standard	Request			
444	0.1% Formic Acid in 80% Water / 20% Acetonitrile (v/v)		Request		Request	Request
496	1% Formic Acid in Acetonitrile (v/v)		Request			
417	1% Formic Acid in Water (v/v)			Request		
550	0.2% Isopropylamine in Methanol (v/v)			Request		
794	0.2% Phosphoric Acid in 55% Acetonitrile / 45% Water (v/v)		Request			
565	1% Phosphoric Acid in 80% Acetonitrile / 20% Water (v/v)		Request			
564	1% Phosphoric Acid in 62% Acetonitrile / 38% Water (v/v)		Request			
LC821	0.025% TFA in Acetonitrile (v/v)	Request				
LC820	0.025% TFA in Water in (v/v)	Request				
423	0.05% TFA in Acetonitrile (v/v)		Standard	Standard		Request
486	0.05% TFA in Water (v/v)		Standard	Standard		Request
575	0.035% TFA in Acetonitrile (v/v)		Request			Standard
573	0.08% TFA in Acetonitrile (v/v)		Request			
493	0.09% TFA in Acetonitrile (v/v)		Request			
587	0.09% TFA in 80% Acetonitrile and 20% Water (v/v)		Request			
407	0.1% TFA in Acetonitrile (v/v)	Request	Standard	Standard		Request
LC407	0.1% TFA in Acetonitrile (v/v)	Standard				
478	0.1% TFA in 98% Acetonitrile / 2% Water (v/v)	Request	Standard			
586	0.1% TFA in 60% Acetonitrile / 40% Water (v/v)		Request			
812	0.1% TFA in 50% Acetonitrile / 50% IPA (v/v)	Standard				
465	0.1% TFA in Methanol (v/v)		Standard	Standard		Request
484	0.1% TFA in 95% Methanol / 5% Water (v/v)		Request	Request		
437	0.1% TFA in 90% Methanol / 10% Water (v/v)		Request	Request		
485	0.1% TFA in Water (v/v)	Request	Standard	Standard		Request
LC485	0.1% TFA in Water (v/v)	Standard				
479	0.1% TFA in 98% Water / 2% Acetonitrile (v/v)	Request	Standard			
442	0.1% TFA in 90% Water / 10% Methanol (v/v)		Request	Request		
438	1% TFA in Acetonitrile (v/v)		Request			

MULTI-COMPONENT SOLVENT BLENDS

Family	Description	Package Options				
		2.5L	4L	20L NP	20L NS	200L
476	50% Acetone / 50% DCM (v/v)					Request
440	97% Acetonitrile / 3% n-Propyl Alcohol (v/v)			Request		
403	95% Acetonitrile / 5% Water (v/v)		Request			
409	90% Acetonitrile / 10% Water (v/v)		Standard			
405	86% Acetonitrile / 14% Water (v/v)		Request			Request
547	85% Acetonitrile / 15% IPA (v/v)			Request		
494	80% Acetonitrile / 20% Methanol (v/v)		Request			
460	80% Acetonitrile / 20% Water (v/v)		Request	Request		
800	75% Acetonitrile / 25% Water (v/v)		Standard			
468	70% Acetonitrile / 30% Water (v/v)		Request	Request		
489	67% Acetonitrile / 33% Water (v/v)		Request			Request
456	65% Acetonitrile / 35% Methanol (v/v)		Request			Request
581	65% Acetonitrile / 35% Water (v/v)		Request			
455	60% Acetonitrile / 40% Methanol (v/v)				Request	
551	50% Acetonitrile / 50% Methanol (v/v)		Request			Request
425	52% Acetonitrile / 48% Water (v/v)		Request	Request		Request
896	50% Acetonitrile / 50% n-Propyl Alcohol (v/v)		Standard			
435	50% Acetonitrile / 50% Water (v/v)		Standard	Standard		Request
457	50% Acetonitrile / 50% Water (w/w)		Request			
LC825	40% Acetonitrile / 40% IPA / 20% Acetone (v/v)	Request	Standard			
597	60% n-Butyl Acetate / 40% Methanol Blend (v/v)			Request		Request
828	95% DCM / 5% Methanol (v/v)		Request			
492	90% DCM / 10% Methanol (v/v)		Standard		Request	
559	80% DCM / 20% Ethyl Acetate (v/v)		Request			
795	80% DCM / 20% Ethyl Ether (v/v)		Request			
588	80% DCM / 20% Methanol (v/v)		Request			
811	90% DMSO / 10% Water (v/v)			Standard		
555	70% Ethyl Acetate / 30% Hexane (v/v)		Request	Request		
556	50% Ethyl Acetate / 50% Hexane (v/v)		Request	Request		
449	97% Hexane / 3% Ethyl Acetate (v/v)			Request		
434	80% Hexane / 20% Acetone (v/v)					Request
557	70% Hexane / 30% Ethyl Acetate (v/v)		Request	Request		
420	70% IPA / 30% Water (v/v)		Standard	Standard		
552	50% IPA / 50% Heptane (v/v)		Request			
482	95% Methanol / 5% Water (v/v)		Request			
897	90% Methanol / 10% Sulfuric Acid (v/v)		Request			
447	90% Methanol / 10% Water (v/v)		Request		Request	
448	85% Methanol / 15% Hexane (v/v)			Request		
892	85% Methanol / 15% Water (v/v)		Request			
826	71% Methanol / 24% Water / 5% THF (v/v)		Request			
428	70% Methanol / 30% Water (v/v)					Request
450	65% Methanol / 35% Reagent Alcohol (v/v)			Request		
427	65% Methanol / 35% Water (v/v)			Request		
802	60% Methanol / 40% Water (v/v)		Request			
801	55% Methanol / 45% Water (v/v)		Request			
416	50% Methanol / 50% Reagent Alcohol (v/v)			Request		
400	50% Methanol / 50% Water (v/v)		Standard	Standard		Request
429	97% Water / 3% n-Propyl Alcohol (v/v)			Request		
808	95% Water / 5% Acetonitrile (v/v)		Request	Request		
483	95% Water / 5% Methanol (v/v)		Request			
469	90% Water / 10% Acetonitrile (v/v)		Request	Request		
453	90% Water / 10% Methanol (v/v)		Request	Request		
824	80% Water / 20% Acetonitrile (v/v)		Request			
490	78% Water / 22% Methanol (v/v)		Request			Request
803	75% Water / 25% Acetonitrile (v/v)		Request			
570	60% Water / 40% n-Propyl Alcohol (w/w)		Standard			
436	55% Water / 35% Acetonitrile / 10% Methanol (v/v)			Request		
827	50% Water / 50% n-Propyl Alcohol (v/v)		Request			

NEW: LC-MS Flush Solution 50% IPA / 50% Water sold in 6 x 1L GL45 (LC703-1)

Packaging Notes:

NP: NowPak; 20L lined bag inside HDPE overpack; contract required 200L: Stainless Steel Pressure Dispense System (SSPDS)

NS: NowSteel; 20L lined bag inside stainless steel overpack; contract required Note: 2.5L bottle has GL45 finish

Product Notes:

- 1) Extended initial lead times and / or minimum order quantities may apply.
- 2) Please consult with your Honeywell Burdick & Jackson Area Manager to order 'Request' formulations.
- 3) LC prefix indicates LC/MS specification solvent blend
- 4) Blends containing alcohols and acids may form esters. For example, in blends containing Formic acid and Methanol, acid concentration will decrease as Methyl Formate is generated.