

Products	for	MicroFab Part #	Supplier Name	Part Number	Contact Info	Comments
<b>Disposables Used for Jetting &amp; Printing</b>						
1) <b>Reservoirs</b>						
with cap	PH-41, PH-41H	C-03	Boca Scientific	<b>S10100</b>	<a href="http://www.bocascientific.com">www.bocascientific.com</a>	Select: 2.5mL column, 10mm pore size for lower filter size, no upper filter
with cap and a bottle	PH-46-LG, PH-47	C-04x-20		<b>W241502</b>	<a href="http://www.pipette.com">www.pipette.com</a>	20mL flat bottom bottle
o-ring	PH-46-LG, PH-48		Grainger	<b>5JJU5</b>	<a href="http://www.grainger.com">www.grainger.com</a>	o-ring for better pneumatic seal
with cap and a bottle	PH-47	C-04-25 (Legacy part; discontinued)	Qorpak	<b>GLC-01082</b>	<a href="http://www.qorpak.com">www.qorpak.com</a>	25mL bottle, Legacy part
with cap	PH-46-SM, PH-46H	C-05	EconoLab	<b>T338-6</b>	<a href="http://www.econo-lab.com">www.econo-lab.com</a>	Non-graduated 2mL microtube reservoirs
2) <b>Minstac Fittings</b>						
Tubing Unions	PH-46, PH-47/MJ-AT	TF-04	Lee Company	<b>TMUA3201950Z</b>	<a href="http://www.theleeco.com">www.theleeco.com</a>	
Pre-assembled tube sets	PH-46, PH-47/MJ-AT	(incl. Minstac union, 20cm teflon tubing, & Min. to Luer adapter)	Lee Company	<b>TUTC3216910L - 10</b>	<a href="http://www.theleeco.com">www.theleeco.com</a>	Specify the length of the tube set
(Male Coupling screws on both end)				<b>TUTC3216915L - 15 cm</b>		Choice: 10, 15, 30 and 60cm
				<b>TUTC3216930L - 30 cm</b>		
				<b>TUTC3216960L - 60 cm</b>		For PH-47: Order long tube set and cut in half if minstac fitting desired ONLY on one end
Minstac (inline) filter (12µm)	MJ-AT	TF-07	Lee Company	<b>INMX0350000A</b>	<a href="http://www.theleeco.com">www.theleeco.com</a>	
3) <b>Tubings</b>						
C-flex tubing	PH-46/MJ-AB	TF-08-x	Cole-Parmer	<b>E-06422-01</b>	<a href="http://www.coleparmer.com">www.coleparmer.com</a>	
PTFE microbore Tubing	PH-46/MJ-AB	(incl. luer to barb fitting, 1m (3')	Nordson EFD	<b>7018272</b>	<a href="http://www.nordson.com">www.nordson.com</a>	
Female luer fitted metal needle	PH-46/MJ-AB	of flexible tubing, sel x=AB or ABL)	Nordson EFD	<b>7018122</b>	<a href="http://www.nordson.com">www.nordson.com</a>	
Fluid Channel Replacement	PH-47/PH-46-LG	C-04x-20-FC	N/A	N/A	<a href="http://microfab.com/contact">http://microfab.com/contact</a>	tubing, one end Minstac, end-cap with two holes and O ring (EPDM o-ring standard, other materials available); one 20 mL bottle; tubing union; push to connect pneumatic fitting
Spare tube set	PH-46-SM	C-05b	N/A	N/A	<a href="http://microfab.com/contact">http://microfab.com/contact</a>	Spare tubing for PH-46-SM, 2-ended male Minstac.
Fluid Channel Replacement	PH-46-SM	C-05a-SM	N/A	N/A	<a href="http://microfab.com/contact">http://microfab.com/contact</a>	Additional / replacement fluid channel for PH-46 printhead with 2 mL reservoirs. Does not require mounting hardware.
4) <b>Filter housing with filter</b>	MJ-AL, MJ-ALB	TF-05 (for MJ-AL-01)	Beswick Engineering	<b>CF-316-20-316-S (example)</b>	<a href="http://www.beswick.com">www.beswick.com</a>	
with no filter	MJ-AL, MJ-ALB	TF-05a (for MJ-AL-00)				
luer adaptor, O-ring	MJ-AL, MJ-ALB		Beswick Engineering	<b>LULF-10M-316-V (example)</b>	<a href="http://www.beswick.com">www.beswick.com</a>	Select O-ring based on fluid properties (EPDM, Buna, or Viton)
<b>General Supplies Useful for Jetting, Printing &amp; Cleaning Devices</b>						
5) <b>Cleaning solution</b>			Cole-Parmer	<b>U-18100-00</b>	<a href="http://www.coleparmer.com">www.coleparmer.com</a>	For hard to clean device tip blockages
5a) <b>For backflush cleaning of MJ-AT type devices</b>				<b>TMDA3201950Z</b>	<a href="http://www.theleeco.com">www.theleeco.com</a> , <a href="http://www.nordson.com">Nordson</a>	Option 1: LEE fitting + Flexible tubing (0.07"/1.8mm I.D.)+ Green 17 gauge Needle dispenser (EFD)
(See two options in Comments column)				<b>TMDA3203950Z, TMRA9502950Z</b>	<a href="http://www.theleeco.com">www.theleeco.com</a> , <a href="http://www.nordson.com">Nordson</a>	Option 2: Two LEE fittings+Flexible tubing (0.07"/1.8mm I.D.)+Green 17 gauge Needle dispenser (EFD connector)
5b) <b>Sonicator for backflush cleaning</b>			Branson	<b>Bransonic B3-R</b>	<a href="http://www.thomassci.com/n/">http://www.thomassci.com/n/</a>	Input: 17 watts, 0.3 amp; Output: 12 watts, 55KHz (Bransonic 3 series)
6a) <b>Cotton swabs 6" with wooden handle</b>			Fisher Scientific	<b>14-960-3P</b>	<a href="http://www.fishersci.com">www.fishersci.com</a>	CAUTION: Be careful not to insert fibers into nozzle during wiping excess fluid after purge
(Also available in 3" wooden handle)				<b>14-960-3N</b>		
6b) <b>Single Tip Swab with Wood Handle (6" wooden handle)</b>			QOSMEDIX	<b>19840</b>	<a href="http://www.qosmedix.com/">http://www.qosmedix.com/</a>	
7) <b>Vials (2 mL) as catcher</b>	Jetlab® machines		Cole Palmer Company	<b>98812-01</b>	<a href="http://www.coleparmer.com">www.coleparmer.com</a>	2 mL Snap-It vials
<b>Ependorf tubes as catcher</b>		C-05	Fisher Scientific	<b>05-669-23</b>	<a href="http://www.fishersci.com">www.fishersci.com</a>	
(for maintenance position; pre-2010 Jetlabs)						
(#1 source can be used as well)						
8) <b>Filter for inks (For offline use)</b>						Recommended for inks with particles bigger than 5% of orifice diameter
5.0µm Nylon for Water-based	All printheads & devices		Fisher Scientific	<b>F2500-50</b>	<a href="http://www.fishersci.com">www.fishersci.com</a>	
5.0µm PTFE for Solvent-based	All printheads & devices		Millipore	<b>SLLS 025 NS</b>	<a href="http://www.millipore.com">www.millipore.com</a>	
Microcentrifuge filters for small volumes	All printheads & devices		Millipore	<b>UFC30GV00</b>	<a href="http://www.millipore.com">www.millipore.com</a>	For volumes 50-500µL
9) <b>Yellow paper for printing</b>		YPAP				