

# Eksigent MicroLC 200 Plus System Quick Reference Card

## Do...

### Add a final step in the LC method to return the loop to the initial mobile phase composition.

This ensures that the sample will not be diluted with residual organic solvent in the loop before it is injected on the column. Refer to "Create the LC Method" in Chapter 3.

### Add an initial hold to the LC method before starting the gradient.

This may improve the peak shape and retention time of early-eluting hydrophilic peaks. The duration of the hold varies with column volume and flow rate. Refer to "Create the LC Method" in Chapter 3.

### Overfill the sample loop.

In the autosampler method, in the **Injection Volume** field, enter a value 2 to 5 times larger than the volume of the sample loop. Also, specify non-zero values for the **Front Volume** and **Rear Volume**. Refer to "Create the Acquisition Method" in Chapter 3.

### Put the wash solvent tubing in the correct solvent: "1" in organic and "2" in aqueous.

The default wash sequence is organic then aqueous. To reverse the sequence (aqueous first and organic second), modify the autosampler method rather than physically changing the bottles. Refer to "Create the Acquisition Method" in Chapter 3.

### Use the recommended tubing and flow rate for the electrode.

The tubing varies based on the electrode diameter. Higher flow rates may cause leaks or high backpressure. Refer to "Plumb the Injection Valve" in Chapter 4 and "Flow Rate and Injection Volume" in Appendix A.

## Do Not...

### Do not operate the system without grounding the electrode.



**WARNING!** Electrical Shock Hazard. Do not bypass the grounding union connection. The grounding union provides safety grounding between the mass spectrometer and the sample introduction device.

Refer to "Plumb the Column for the Turbo V™ Ion Source" in Chapter 4.

### Do not operate the AB SCIEX Turbo V™ ion source above 400°C.

At micro flow rates (4 µL/min to 60 µL/min), most compounds will have optimal performance below 400°C.

### Do not use metered or rapid injection mode for quantitative analysis.

Select **Standard** for the **Sample Injection** mode in the **LC Method Settings** dialog. Refer to "Create the LC Method" in Chapter 3.

### Do not end the batch or sequence without flushing the electrode.

Add a run to the end of the batch or sequence with no sample injection, using a method with a lower ion source temperature and continued flow from the LC. Refer to "Create the LC Method" in Chapter 3.

### Do not cut PEEKsil tubing.

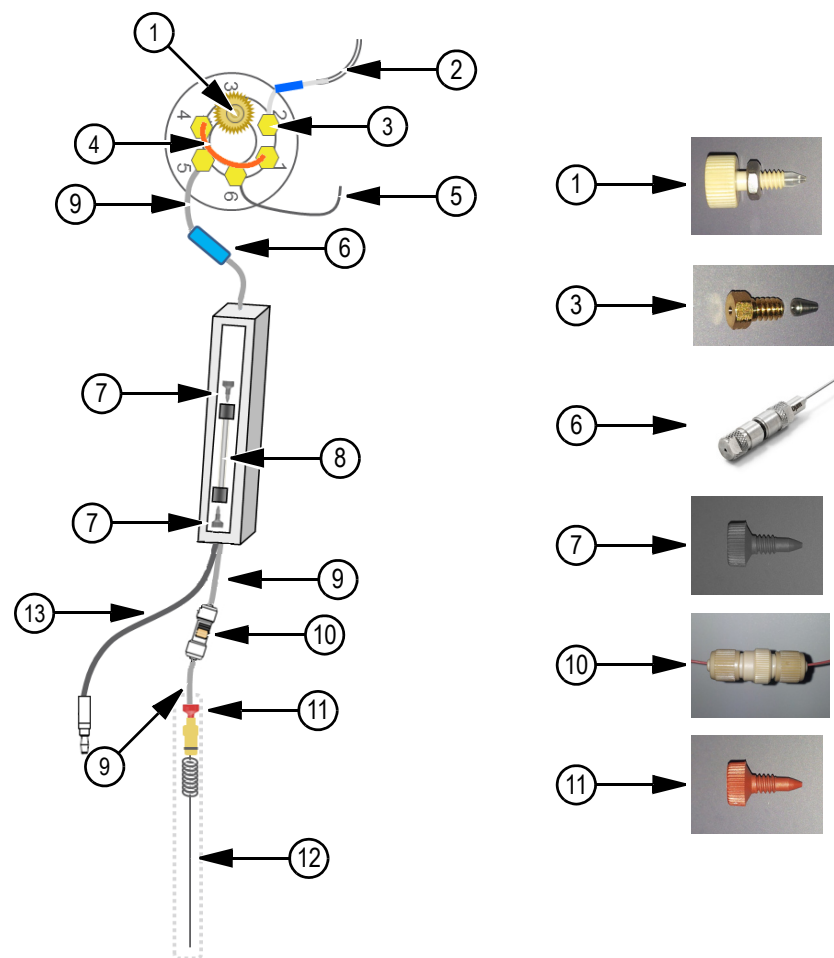
Cutting PEEKsil tubing can result in small particles of glass entering the flow path, leading to plugged tubing and electrodes. Refer to "Best Practices for Working with PEEKsil Tubing" in Chapter 4.

The chapters referenced above are found in the *Eksigent MicroLC 200 Plus System Operator Guide*.

## System Plumbing



**WARNING! Electrical Shock Hazard.** Do not use conductive fittings such as the high-pressure carbon-filled black fittings with the 65  $\mu\text{m}$  ID electrode. Use the red fitting to prevent the risk of electrical shock.



Item	Description	Part Number
1	Injection port	5023797
2	Injection valve waste tube assembly	5017800
3	<ul style="list-style-type: none"> <li>Gold-colored nuts</li> <li>Ferrules</li> </ul>	5024174 910-00087
4	One of the following: <ul style="list-style-type: none"> <li>2 <math>\mu\text{L}</math> PEEKsil loop</li> <li>5 <math>\mu\text{L}</math> PEEKsil loop</li> <li>10 <math>\mu\text{L}</math> PEEKsil loop</li> </ul>	5017798 5017799 205-00054
5	Mixer-to-valve assembly	5017801
6	(Optional) Guard column (for flow <10 $\mu\text{L}/\text{min}$ with 0.3 mm ID columns)	5028658
7	Black PEEK fitting	200-00342
8	2.7 $\mu\text{m}$ HALO fused C18 column, 0.5 mm x 50 mm	805-10100
9	Either of the following, depending on flow rate: <ul style="list-style-type: none"> <li>For flow &gt;~20 <math>\mu\text{L}/\text{min}</math>—Gray PEEKsil, 50 <math>\mu\text{m}</math> ID, 1/32 inch OD, 5 cm</li> <li>or</li> <li>For flow &lt;~20 <math>\mu\text{L}/\text{min}</math>—Orange PEEKsil, 25 <math>\mu\text{m}</math> ID, 1/32 inch OD, 5 cm</li> </ul>	205-00070 205-00089
10	In-line filter	200-00388
11	Red PEEK nonconducting fitting (for <5000 psi only)	200-00330
12	One of the following: <ul style="list-style-type: none"> <li>65 <math>\mu\text{m}</math> ID electrode</li> <li>50 <math>\mu\text{m}</math> ID electrode</li> <li>For flows &lt;~20 <math>\mu\text{L}/\text{min}</math>—25 <math>\mu\text{m}</math> ID electrode</li> </ul>	5029342 5028466 5028467
13	Grounding cable	5016941