Operating Tips

- ❑ Back up your data and methods **regularly** to avoid loss of data if the files are accidentally overwritten, deleted, or if a hardware problem develops with your disk drive.
- ❑ Put the system in standby mode overnight or whenever you won't be analyzing samples for an extended time.
- ❑ Make sure the tune file you are using is appropriate for your samples.
- ❑ Save Tune reports in an MS Logbook for future reference.
- ❑ Regular system maintenance can reduce problems. Maintenance tasks are described on the 1100 Series LC/MSD Maintenance CD-ROM. Keep a maintenance record.
- ❑ Use the Maintenance Logbook and EMF features (in the Diagnosis view) to help you keep track of when maintenance is needed and to keep an online maintenance record.
- ❑ Flush the sample path and clean the spray chamber, capillary tip, and spray shield daily or at the end of each shift. Check the foreline pump fluid level every week.
- ❑ The spray chamber vent hose must be connected to a lab vent that is used **only** for the source (completely separate from the vent hose for the foreline pump). Otherwise, waste products can migrate into the spray chamber vent producing chemical noise.
- ❑ Samples need to be filtered. They should be salt and detergent-free if no chromatography is used.
- ❑ If a UV detector is available, use it in series with the LC/MSD. Try to minimize chromatographic peak broadening by using low dispersion tubing.
- ❑ To avoid chromatographic band broadening, make sure all tubing connections are free of dead volume. Use zero dead-volume (ZDV) fittings when possible.
- ❑ Use fingertight fittings on the LC inlet union. Swaged fittings can compress the frit.
- ❑ Use the following table as a guide to using SIM, condensed scan, and full scan acquisition modes.

Task	Mode
Acquire electrospray data for samples containing large, multiply-charged analytes.	Full Scan
Analyze a mixture with unknown components (small molecules).	Scan
Analyze a mixture with known components in unknown amounts (quantitate).	Scan or SIM
Identify the presence of a few known compounds at low levels within a mixture.	SIM

- ❑ If you are using APCI, the optimal flow rate is 1.0 ml/min. The range is 0.5 to 1.5 ml/min.