

## Mobile Phase Percentages Other Than Suggested Ratios - Tech Information

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The HSQ™ Qualification Kit includes a gradient test that uses default mobile phase compositions of 100/0% and 90/10% for each solvent pair (up to four pairs). These values are pre-set in the HSQ™ spreadsheet and are used to calculate pump gradient accuracy based on absorbance readings at each step.

You can use different percentages (e.g., 50/50) Technically , you can use other ratios such as 50/50. However, we **strongly recommend** using the default 90/10 values. Here's why:

- Pump accuracy errors are most pronounced at extreme compositions like 90/10 or 10/90.
- Using these extremes makes it easier to detect subtle issues in gradient formation or solvent proportioning.
- The spreadsheet is optimized for these values, ensuring consistent and reliable calculations.

If you choose to use different percentages, be aware that the sensitivity of the test to detect pump inaccuracies may be reduced.

 Click [HERE](#) for PQ™ & HSQ Qualification Kits™ ordering information and pictures.

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**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)