

## Acceptable wavelength band width for HPLC detectors when performing an HPLC Performance Qualification - Tech Information

### Guidance on Wavelength Bandwidth Settings for HPLC Detectors During Performance Qualification (PQ)

When performing a **High-Performance Liquid Chromatography (HPLC) Performance Qualification**, selecting an appropriate **wavelength bandwidth** setting for the detector is critical to ensure accurate and reproducible results.

- The **standard bandwidth setting** for most HPLC detectors is **3 nm**. This setting provides a good balance between sensitivity and spectral resolution.
- A **bandwidth of 5 nm** is generally considered **too broad** for PQ purposes, as it may compromise spectral resolution and lead to less precise peak identification.
- Conversely, a **1 nm bandwidth** is typically **too narrow**, potentially introducing excessive noise and reducing signal stability, which can affect qualification outcomes.

#### Recommendation:

For PQ procedures, maintain the detector's wavelength bandwidth at **3 nm** unless otherwise specified by the instrument manufacturer or method-specific requirements.

Click [HERE](#) for MicroSolv PQ and HSQ Kit 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)