

Linearity Solutions Quantity Supplied in the HPLC Qualification Kits Discussed - Tech Information

Date: 7-APRIL-2012 Last Updated: 28-JUNE-2025

MICROSOLV's Chemical Solutions brand of Qualification kits for HPLC: the HSQ™ & PQ™ Kits includes six linearity solutions to support a broad and flexible range of concentration levels for Performance Qualification (PQ) of HPLC systems. This design ensures that users can evaluate the linear dynamic range of their detectors and validate system performance across a wide spectrum of analyte concentrations.

Why Six Solutions?

The inclusion of six distinct concentrations allows for:

- Robust linearity assessment across a wide range
- Improved statistical confidence in regression analysis (e.g., R^2 values)
- Flexibility to match your method's expected concentration range
- Compliance with regulatory expectations for method validation and PQ

While **six points** provide a comprehensive profile, your internal Standard Operating Procedures (SOPs) may require fewer points depending on your specific application or regulatory environment. For example, some labs may only require three to five points for routine PQ, especially if the method has a narrow working range.

What Is Linearity Testing?

Linearity testing is a critical part of PQ. It confirms that your detector response is proportional to analyte concentration within the range of interest. This is essential for:

- Ensuring quantitative accuracy
- Verifying instrument performance
- Supporting method validation and regulatory compliance

What's in the HSQ™ Kit?

Each HSQ™ Kit includes:

- Six pre-made linearity solutions at defined concentrations
- Traceable documentation for each solution
- Optional add-ons for system suitability and performance checks

These kits are designed to simplify PQ workflows and reduce preparation time, while maintaining high standards of accuracy and reproducibility.

 Click [HERE](#) for PQ Kit and HSQ Kit ordering information and pictures.

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