

## Theoretical plate estimates indicates column condition – Primer

One can estimate a reasonable plate number for any column as:

$$N \approx 300 L/dp$$

L is the column length (in millimeters) and dp is the particle diameter (in micrometers).

For example for 250mm x 4.6mm column packed with 5 micron particles, the predicted value is:

$$N \approx 15,000$$

If the measured value of N is about 20% of this predicted value, the column is in good condition.



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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)

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