

Theoretical plate N estimate for real samples – How to

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

$$N \approx 300 L/d_p$$

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

For example for 250 mm x 4.6 mm 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 conditions.



Printed from the Chrom Resource Center

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

Date: 05-17-2024