

What is Post Time in an HPLC gradient method - Primer

In HPLC application notes that use gradients, you will see a value listed for “post time” at the end of the gradient table. This parameter specifies the time to hold at these mobile phase conditions until the next injection. Generally, the conditions at the end of the gradient and the beginning of the next run will be the same. The mobile phase is isocratic during this time and the flow rate is not changed.

The purpose of the post time is to allow the column to equilibrate completely in preparation for the next injection. Without sufficient post time, the retention times in the next run may not be reproducible. Therefore, post time is important for method precision. Cogent™ columns often require less post time than in other methods such as ion pairing or HILIC.

With ion pair, it can take a long time for the additive to load onto the column, while in HILIC, formation of the water layer may require a significant time. Cogent™ columns avoid these issues and therefore can offer superior precision and lower total run times.