

## EcoSEC® GPC System

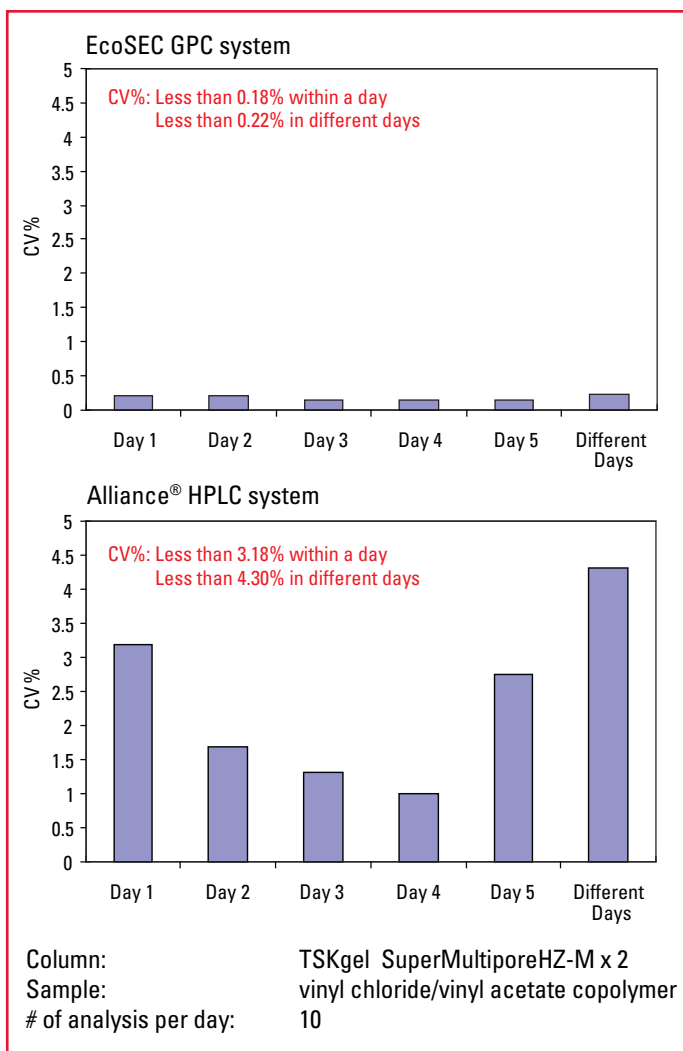
Comparison with Alliance system

### Reproducibility of Molecular Weight (Mw)

A sample was injected 10 times a day for 5 days. The Mw of the sample was determined after each run and the CV was calculated for each day as well as across 5 days. As you can see in *Figure 1*, the reproducibility of the EcoSEC GPC system was superior by a factor of 3 to that of the Alliance system.

The excellent reproducibility of the EcoSEC GPC system is due to advanced flow rate control, separate pump oven, flow-through RI reference cell, low dead volume, and the inherent linearity of our TSKgel SuperMultipore HZ columns.

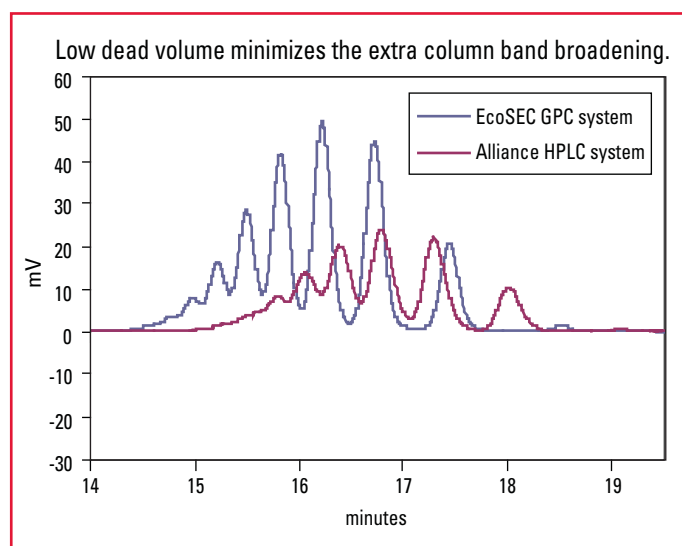
Figure 1. High repeatability (Mw)



### Semi-micro system

The EcoSEC GPC system is a semi-micro system. The advanced engineering and low dead volume enable the use of semi-micro GPC columns. TSKgel SuperMultiporeHZ columns are 4.6 mmID and are ideally suited to take advantage of the EcoSEC GPC system. The semi-micro size consumes 1/6th the solvent (saves money, lowers disposal costs) and enables higher throughput due to shorter run times. *Figure 2* compares the EcoSEC GPC system with the Waters Alliance system. Note that due to low dead volume, the peaks are sharper, resolution is higher and elution is faster on the EcoSEC GPC system.

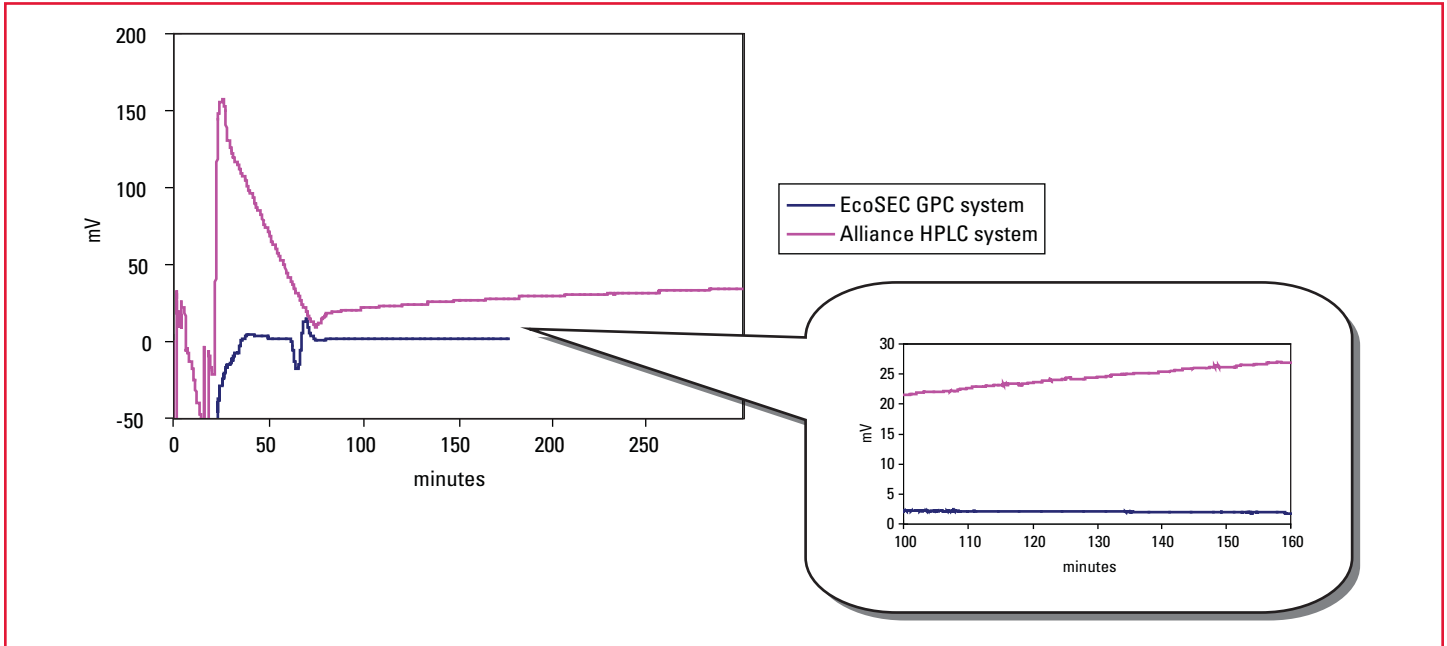
Figure 2. The EcoSEC GPC system compared to a conventional GPC system.



## One-touch Warm Up

The EcoSEC GPC system has a one button warm-up feature. As you can see in *figure 3*, the EcoSEC GPC system is ready to go just 2 hours after Power is turned on and the warm-up button activated. The RI baseline is stable and noise free compared to the Alliance HPLC system, which recommends that the RI detector be left on at all times.

**Figure 3.** Quick warm-up and stable RI baseline compared to Alliance.



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