



## Using Buffer Additives in CZE

When you add Modifiers (Buffer Additives) to your CZE method, the following changes can be expected:

**Joule Heating:** Adding high concentrations of organic modifiers or other additives can cause an increase in current or an increase in Joule Heating.

**Viscosity:** Adding high concentrations of additives such as methylcellulose will increase viscosity. Also this can cause a molecular sieving effect as well.

**Electro Osmotic Flow:** Depending on the additive, the EOF can be suppressed or enhanced but organic solvents usually lower the EOF.

**Current:** When using high concentrations of surfactants as an additive, this can cause a high current to be produced.

**Analyte to Wall Interaction:** Depending on the additive, this can prevent analyte to wall interaction or binding to the wall.

**Migration Time:** Depending on the additive, you can increase or decrease migration times. Additives are also used to change migration order.

**Resolution:** Additives can enhance your resolution and change your peak shape. Using additives permit indirection detection to take place.

**Electrophoretic Mobility:** Using additives can enhance analyte electrophoretic mobility.

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