

## KORY'S TECK-TIPS

### Choosing the Right Accessories When Using High Temperature Inferno Columns

#### Liners

- Liners with wool act as a barrier for particulates and less volatile compounds.
- Routinely changing liners will reduce activity from buildup of non-volatile compounds.
- Liners without wool are recommended for very active compounds like pesticides.
- Higher inlet temperatures mean greater expansion volumes for solvents. Make sure that the volume of your inlet liner matches your solvent expansion volume.

#### Inlet Base Seals

- A stainless steel base seal can be used for inert samples like hydrocarbons.
- A gold plated base seal should be used for reactive samples like pesticides.
- Routinely changing base seals can decrease activity and help prevent ghost peaks.

#### Ferrules

- Graphite ferrules are recommended for non-MS applications because of their high temperature limits (>400C).
- Vespel ferrules are not recommended for high temperature analysis because they shrink above 360C.
- Use of metal ferrules is recommended for MS use at high temperatures.
  - For 0.25mm ID columns – Phenomenex part number 073200
  - For 0.32mm ID columns – Phenomenex part number 173201

#### Septa

- High temperature applications usually mean high inlet temperatures. Make sure that the septum is rated for your inlet temperature.
- High temperatures may cause septa to wear faster. Routine maintenance of the inlet should include changing of the septum.
- Thinner needles like on-column needles should be matched with GuideRight septa.

#### Guard Columns

- When using a guard at high temperatures, make sure that the press-tight connection is secure.
- The most important aspect of a good seal is a good column cut.
  - The column end should be square and smooth (like a straw). Any irregularities will cause leaks.
  - Columns are long. Repeat cutting until a good cut is achieved.
  - Lightly scoring the column usually creates a cleaner opening.