

HALO® PAH, 2.7 µm COLUMN CARE & USE SHEET

HALO®

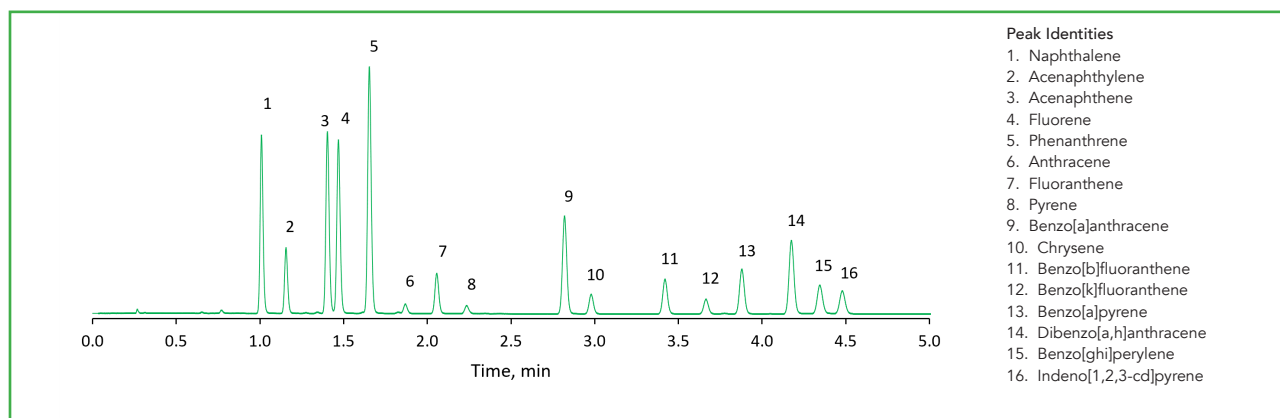
Description

HALO® PAH is a high-speed, high-performance liquid chromatography column based on the proven Fused-Core® particle design. This particle design exhibits very high column efficiency due to the shallow diffusion paths in the 0.5-micron thick porous shell and the small overall particle size of 2.7-microns. The Fused-Core® particle has a surface area of ~ 125 m²/g and an average pore size of 90 Å. The unencapped trifunctional C18 stationary phase of HALO® PAH provides a stable, reversed-phase packing specifically designed for the separation of polycyclic aromatic hydrocarbons.

Operation Guidelines

- The direction of flow is marked on the column label.
- Reversed flow may be used to attempt removal of inlet plugging or contamination.
- A new column contains 100% acetonitrile. Initial care should be taken to avoid mobile phases that are immiscible with this solvent or could cause a precipitate.
- Water and all common organic solvents are compatible with HALO® PAH columns.
- HALO® PAH columns are best used at temperatures below 60 °C for maximum column life.
- Mobile phase pH for HALO® PAH columns is best maintained in the range of pH = 2 to 9 for maximum column stability.
- HALO® PAH columns are stable to operating pressures up to 600 bar (9000 psi).
- For high sensitivity mass spectrometric detection of small organic analytes, we recommend an overnight rinse with high purity solvents (MS grade) to a waste container at lowered flow rate. A 50% acetonitrile/water solution at room temperature at 0.1-0.2 mL/min should remove any traces of solvents or impurities from the column and instrument that may appear for very high sensitivity analyses.

Representative Chromatogram



*For method specific details or questions about your specific HALO® PAH lot, please contact us at support@advanced-materials-tech.com.

Column Care & Storage

To maximize column life, ensure that samples and mobile phases are particle-free. The use of guard columns or an in-line filter with 0.5-micron porosity between the sample injector and the column is highly recommended. Should the operating pressure of the column suddenly increase beyond normal levels, temporarily reversing the flow direction of the column may be attempted to remove debris on the inlet frit. To remove strongly retained materials from the column, flush the column in the reverse direction with very strong solvents such as 100% of the organic component of the mobile phase in use. A mixture (95/5 v/v) of dichloromethane and methanol is often effective at this task.

Long-term storage of silica-based, reversed-phase columns is best in 100% acetonitrile. Columns may be safely stored for short periods (up to 3 or 4 days) in most common mobile phases. However, when using buffers, it is best to protect both the column and the HPLC equipment and remove the salts by flushing the column with the same mobile phase without the buffer (e.g., when using 60/40 ACN/buffer, flush the column with 60/40 ACN/H₂O) to eliminate any danger from corrosion from the salts while providing rapid re-equilibration of the column with the original mobile phase. Before storing the column, the end-fittings should be tightly sealed with the end-plugs that came with the column to prevent the packing from drying.

Safety

- HPLC columns are for laboratory use only. Not for drug, household, or other use.
- Users of HPLC columns should be aware of the toxicity or flammability of the mobile phases chosen for use with the columns. Precautions should be taken to avoid contact and leaks.
- HPLC columns should be used in well-ventilated environments to minimize concentration of solvent fumes.

Ordering Information & Technical Support

- For ordering information or for technical support on this product, please contact us at support@advanced-materials-tech.com or halocolumns.com or contact your local HALO® distributor.



halocolumns.com

