

Molecular Sieve 5A PLOT Columns

Restek's molecular sieve 5A PLOT columns are designed for efficient separation of Ar/O₂ and other permanent gases, including CH₄, C₂H₆, and CO. Special coating and deactivation procedures ensure chromatographic efficiency and the integrity of the porous layer coating. Molecular sieves have very high retention, allowing separations of permanent gases at temperatures above ambient. Additionally, our unique immobilization process guarantees that the uniform particles remain adhered to the tubing—even after continuous valve-cycling.

Our revolutionary molecular sieve 5A PLOT columns separate Ar/O₂ and H₂/He at ambient temperature or above (see figure). These columns also are an excellent choice for rapid separation of permanent gases in refinery or natural gas.

Rt[®]-Msieve 5A Columns (fused silica PLOT)

ID	df	temp. limits	15-Meter	30-Meter
0.25mm	20μm	to 300°C	19773	
0.32mm	30μm	to 300°C	19720	19722
0.53mm	50μm	to 300°C	19721	19723

MXT[®]-Msieve 5A Columns (Siltek[®]-treated stainless steel PLOT)

Advantages of metal MXT[®] PLOT columns include:

- Can be made in small coil diameters—perfect for tight spaces.
- Will not spontaneously break, making them ideal for rugged environments.
- Designed for robust performance in process GCs and field instruments.
- Available in 3.5" coil diameter or 7" diameter 11-pin cage.

ID	df	temp. limits	15-Meter	3.5" coil 30-Meter	7" diameter 11-pin cage 30-Meter
0.25mm	20μm	to 300°C	79717		
0.53mm	50μm	to 300°C		79723-273	79723



advanced technology

Details on pages 106-107.



did you know?

Rt[®]-Msieve 5A PLOT columns are designed for efficient separation of Ar/O₂ and other permanent gases, including CH₄, C₂H₆, and CO.



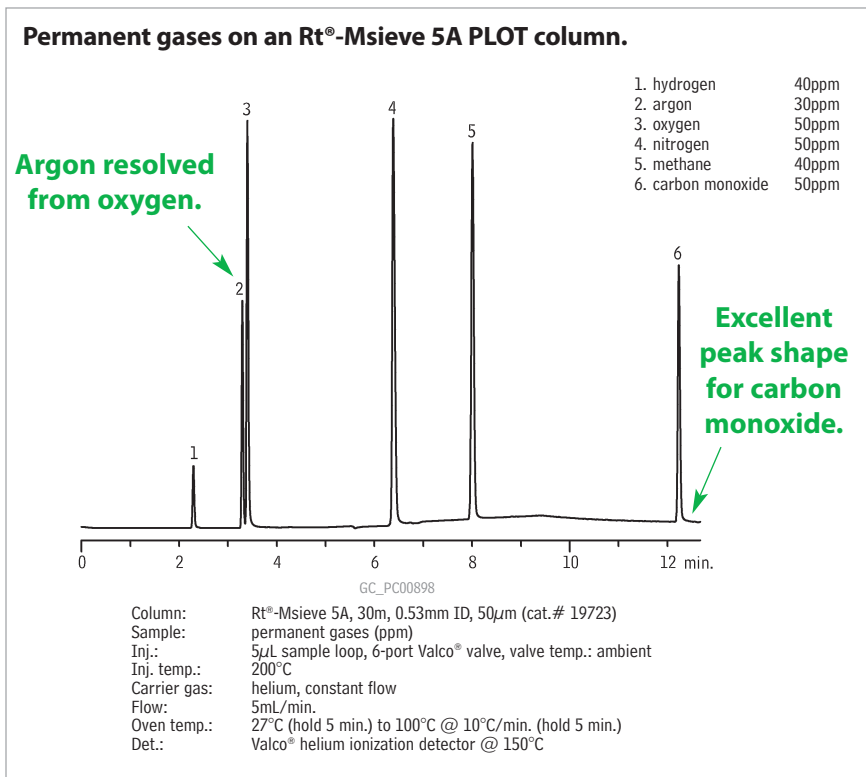
tech tip

Because molecular sieve materials are very hydrophilic, they will adsorb water from the sample or carrier gas. Water contamination can have a detrimental effect on peak symmetry and can reduce the resolution of all compounds. If water contamination occurs, reactivate your Rt[®]-Msieve 5A PLOT column by conditioning at 300 °C with dry carrier gas flow for 3 hours.



tech tip

Carbon dioxide will not elute from molecular sieve columns. Rt[®]-Q-BOND is a good choice for this analysis.



did you know?

ShinCarbon ST micropacked columns are another alternative for analyzing permanent gases.

See page 130 for information.

