

Molecular Sieve 5A PLOT Columns

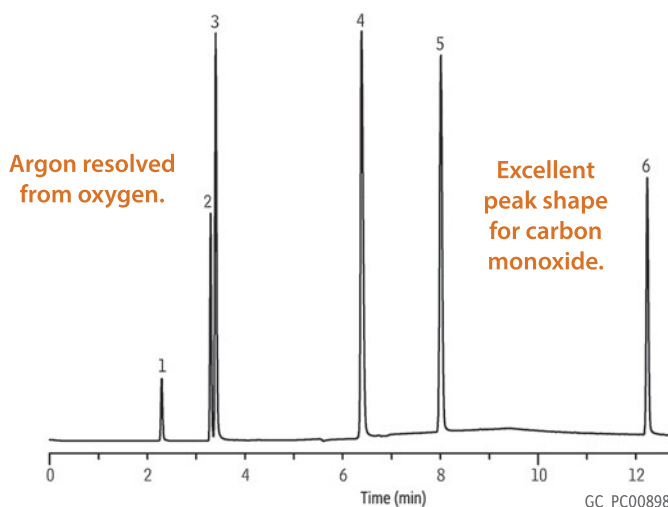
Restek's molecular sieve 5A PLOT columns are designed for efficient separation of argon/oxygen and other permanent gases, including carbon monoxide. Special coating and deactivation procedures ensure chromatographic efficiency and the integrity of the porous layer coating. Molecular sieves have very high retention, allowing separations of permanent gases at temperatures above ambient. Our deactivation technology also allows carbon monoxide to elute as a sharp peak. Additionally, our unique immobilization process guarantees that the uniform particles remain adhered to the tubing—even after continuous valve-cycling.

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

- Improve accuracy with sharp, symmetrical peaks for argon, oxygen, and carbon monoxide.
- Easily separate permanent gases at temperatures above ambient.
- Restek[®] PLOT technology reduces particle release, improving flow reproducibility and reducing downtime for maintenance.
- Stable to 300 °C.

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

Separation of Argon/Oxygen and Other Permanent Gases on Rt[®]-Msieve 5A



Peaks	Conc. (µg/mL)	Column	Rt [®] -Msieve 5A, 30 m, 0.53 mm ID, 50 µm (cat.# 19723)
1. Hydrogen	40	Sample	Permanent gases
2. Argon	30	Injection	Sample valve
3. Oxygen	50	Sample Loop Vol.:	5 µL
4. Nitrogen	50	Valve Name:	6-port Valco® valve
5. Methane	40	Inj. Temp.:	200 °C
6. Carbon monoxide	50	Valve Temp.:	Ambient
		Oven	
		Oven Temp.:	27 °C (hold 5 min) to 100 °C at 10 °C/min (hold 5 min)
		Carrier Gas	He, constant flow
		Flow Rate:	5.0 mL/min
		Detector	Valco® helium ionization detector @ 150 °C

did you know?

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

similar phases

HP PLOT Molsieve, CP-Molsieve 5A, Molsieve 5A, AT-Molsieve, PLT-5A

i tech tip

Molecular sieve materials are very hydrophilic

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.

also available

Metal MXT[®] PLOT Columns

See page 129.

