

Permanent Gases & Hydrocarbon Analysis

ShinCarbon ST Packed/Micropacked Columns

- Separate permanent gases, including CO/CO₂, without cryogenic cooling.
- Rapid separations of permanent gas/light hydrocarbon mixtures.
- Excellent compatibility with most GC detectors—minimal bleed, minimal baseline rise.
- Preconditioned, less than 30 minutes to stabilize.

Analyze oxygen, nitrogen, methane, carbon monoxide, and carbon dioxide with one column and at room temperature. ShinCarbon ST material, a high surface area carbon molecular sieve (~1,500 m²/g), is the ideal medium for separating gases and highly volatile compounds by gas solid chromatography (GSC). The rapid, above-ambient analyses these columns provide will be a great convenience. Excellent thermal stability of the high surface area carbon, combined with careful conditioning during column manufacturing, ensures low-bleed operation and rapid stabilization when installing a new column. Custom-made ShinCarbon ST columns are available on request.

ShinCarbon ST is a highly stable material. Its 330 °C upper temperature limit minimizes bleed and baseline rise during temperature programming, making the material compatible with most detection systems used for gas analysis, including TCD or HID. All ShinCarbon ST columns are fully conditioned in an oxygen/moisture free environment to prevent contamination. This minimizes stabilization time (less than 30 minutes) when installing a new column which, in turn, minimizes downtime.

ShinCarbon ST 80/100 Columns (packed) (SilcoSmooth® Stainless Steel)*

| OD | ID | 2-Meter |
|------------------|-------|---------|
| 1/8" Silcosmooth | 2.0mm | 80486- |

ShinCarbon ST 100/120 Columns (micropacked) (SilcoSmooth® Stainless Steel)**

| OD | ID | 1-Meter | 2-Meter |
|--------|--------|-------------|---------|
| 1/16" | 1.0mm | 19809 \$245 | 19808 |
| 0.95mm | 0.75mm | 19810 \$245 | |

*Please add column instrument configuration suffix number to cat.# when ordering. See chart on the next page.

**Does not include column nuts and ferrules. Optional installation kits can be ordered separately—see page 133.

it's a fact

ShinCarbon ST is an ideal packing material for permanent gases, low molecular weight hydrocarbons, sulfur dioxide, and Freon® gases.

also available

For adapter kits for installing packed/micropacked columns, see **page 133**.

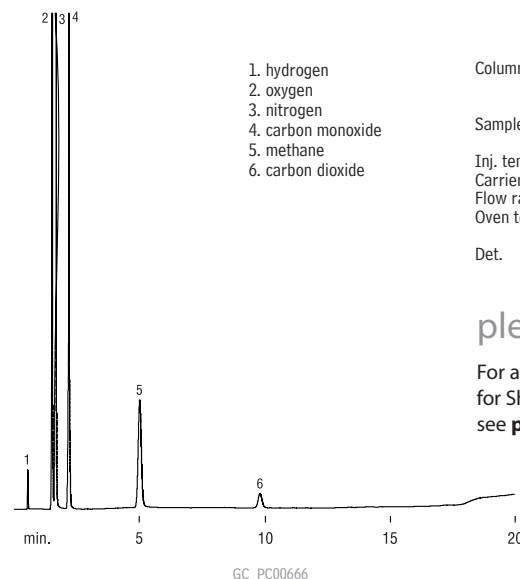
Chromatogram Search Tool

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www.restek.com/chromatograms



Separate permanent gases in 10 minutes, without cryogenics.



1. hydrogen
2. oxygen
3. nitrogen
4. carbon monoxide
5. methane
6. carbon dioxide

Column: ShinCarbon ST, 100/120 mesh, 2m, 1mm ID micropacked (cat.# 19808)
 Sample: 5µL permanent gases mix, approx. 5 mole % each
 Inj. temp.: 100°C
 Carrier gas: helium
 Flow rate: 10mL/min.
 Oven temp.: 40°C (hold 3 min.) to 250°C @ 8°C/min. (hold 10 min.)
 Det. HID @ 200°C

please note

For additional chromatograms for ShinCarbon ST columns, see **pages 647, 649, and 652**.