

Zebron® GC Columns



CERTIFIED
MS
ESC
EQUIPPED

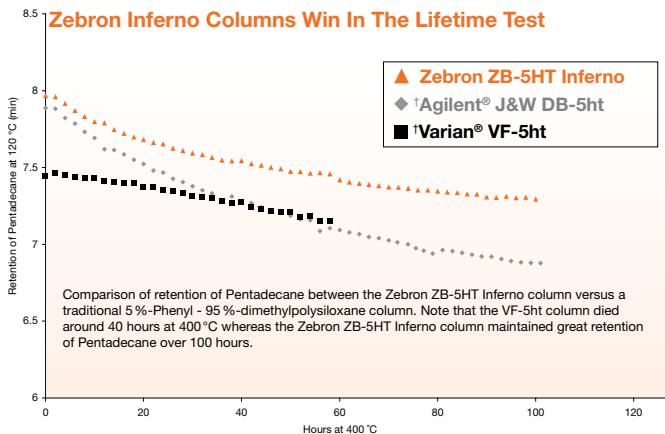
guarantee

ZB-5HT Inferno™

- First non-metal columns stable to 430 °C
- Robust column for high temperature bake outs and analysis, such as biodiesel, long-chain hydrocarbons, polymers, and high molecular weight compounds
- Provides true boiling point separation for hydrocarbon distillation methods
- Longer lifetime with rugged high temperature, polyimide coated, fused silica tubing
- Low activity, provides good peak shape for acidic and basic samples
- Individually tested for low bleed, MS certified
- Temperature Limits: -60 to 400/430 °C (Isothermal/TPGC)*

Alternative to Any 5%-Phenyl-95% Dimethylpolysiloxane High Temperature Phase:

- DB-5ht
- VF-5ht
- HT-5
- Stx-5HT
- XTI-5HT



Comparison of retention of Pentadecane between the Zebron ZB-5HT Inferno column versus a traditional 5%-Phenyl - 95%-dimethylpolysiloxane column. Note that the VF-5ht column died around 40 hours at 400°C whereas the Zebron ZB-5HT Inferno column maintained great retention of Pentadecane over 100 hours.

Conditions for all columns**:

Dimensions: 30 meter x 0.25 mm x 0.10 µm

Injection: 1.0 µL of test mix AGO-7578

Carrier Gas: Helium @ 1.9 mL/min (constant flow)

Oven Program: 120 °C Isothermal

Detector: Flame Ionization Detector (FID) @ 400 °C

Sample: Pentadecane

How does the lifetime test work?

In the lifetime study above, the Zebron ZB-5HT Inferno column has twice the lifetime as the two comparative columns. For the test, all columns were held at 400 °C for 2 hours and then the oven was lowered to 120 °C for Pentadecane analysis. The Varian HT column broke just after 40 hours at 400 °C. The ZB-5HT had the same retention for Pentadecane at 100 hours as the Agilent® J&W DB-5ht column at 40 hours—over 2X the lifetime!



*0.53 mm ID columns are rated to 400 °C max operational temperature.

Contact Phenomenex or your local Phenomenex distributor for additional GC products and applications.

2007 R&D 100
Award Recipient

If Zebron columns do not provide you with equivalent or better separations as compared to any other GC column of the same phase and comparable dimensions, return the column with comparative data within 45 days for a FULL REFUND.

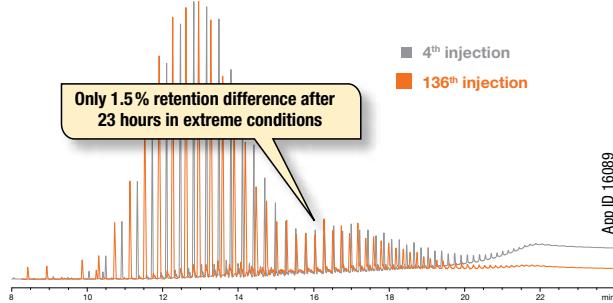
Column Profile



Applications

- High Boiling Petroleum Products
- Triglycerides
- Simulated Distillation Methods
- Diesel Fuel
- Long-chained Hydrocarbons
- Motor Oils
- Polymers/Plastics
- Surfactants
- High Molecular Weight Waxes

Paraffin Wax



Column: Zebron ZB-5HT Inferno
Dimensions: 15 meter x 0.32 mm x 0.10 µm
Part No.: 7EM-G015-02
Injection: Direct on column @ 43 °C, 0.1 µL
Carrier Gas: Helium @ 1.9 mL/min (35 cm/sec) (constant flow)
Oven Program: 40 °C for 2 min to 430 °C @ 20 °C for 10 min
Detector: FID @ 430 °C
Sample: Paraffin Wax

Ordering Information

Zebron ZB-5HT Inferno GC Columns

ID(mm)	df(µm)	Temp. Limits °C	Part No.	Price
10-Meter with 2-Meter Spliced Guard (0.53 mm ID)				
0.32	0.10	-60 to 400/430	7CM-G015-02-GST	
15-Meter				
0.25	0.10	-60 to 400/430	7EG-G015-02	
0.25	0.25	-60 to 400/430	7EG-G015-11	
0.32	0.10	-60 to 400/430	7EM-G015-02	
0.32	0.25	-60 to 400/430	7EM-G015-11	
0.53	0.15	-60 to 400	7EK-G015-05	
15-Meter with 2-Meter Spliced Guard (0.53 mm ID)				
0.32	0.10	-60 to 400/430	7EM-G015-02-GST	
20-Meter				
0.18	0.18	-60 to 400/430	7FD-G015-08	
30-Meter				
0.25	0.10	-60 to 400/430	7HG-G015-02	
0.25	0.25	-60 to 400/430	7HG-G015-11	
0.32	0.10	-60 to 400/430	7HM-G015-02	
0.32	0.25	-60 to 400/430	7HM-G015-11	
0.53	0.15	-60 to 400	7HK-G015-05	
60-Meter				
0.25	0.25	-60 to 400/430	7KG-G015-11	

Note: If you need a 5 in. cage, simply add a (-B) after the part number, e.g., 7HG-G015-11-B. Some exceptions may apply. Agilent 6850 and some SRI and process GC systems use only 5 in. cages. See p. 91.