

*Phenomenex
Exclusive!*



Easy Seals™

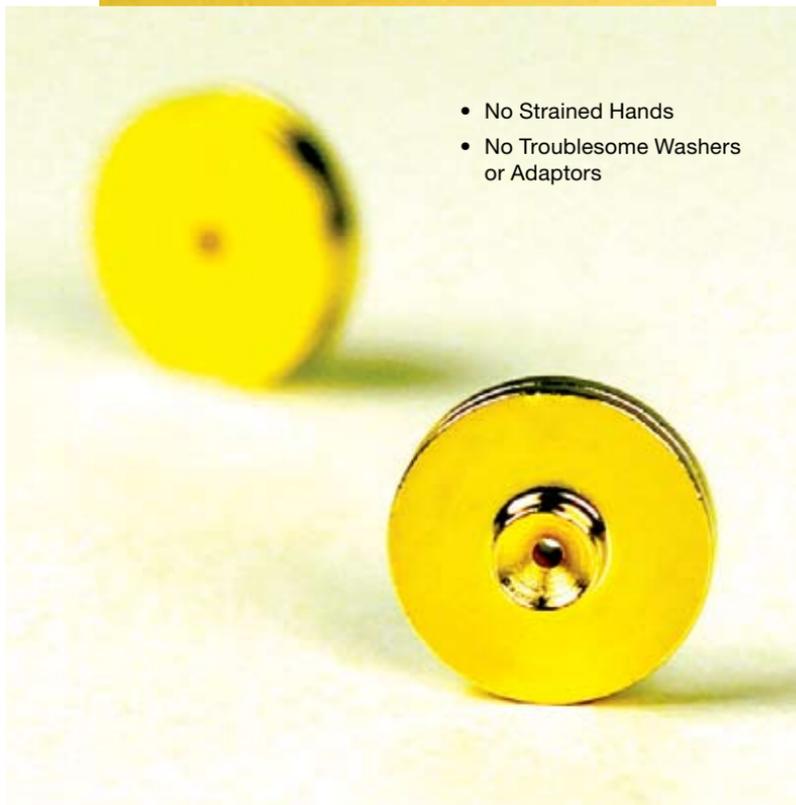
Inlet Base Seals

*Guaranteed fit for
Agilent® 5000, 6000 and
7000 Series GCs*

 **phenomenex**[®]
...breaking with tradition™



The Easy Seals™ Gold Standard



- No Strained Hands
- No Troublesome Washers or Adaptors

Continuing Innovation

Our inventive philosophy and expertise allow us to continually expand our GC product family, which includes novel solutions like Easy Seals, patented technologies, and 3 R&D 100 award-winning GC column chemistries. Learn more at www.phenomenex.com/innovate.





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Designed for Easy Tightening

Softer metal alloy reduces strain on hands.
No washers required!

p. 4-5

Improve Reproducibility

Easy installation reduces operator
variability

p. 6-7

Leak-Tight up to 400 °C

Prevent excessive bleed, activity, and
column replacement costs

p. 8

Reduce Inlet Activity

Thicker gold plating improves inertness

P. 9

Ordering Information

Fits for all Agilent 5000, 6000, and 7000 Series GCs,
no adaptors needed!

guarantee

If Easy Seals do not perform as well or better than your current gold-plated inlet base seal product of similar style, dimensions, and material, simply return the product with your comparative data within 45 days for a FULL REFUND.

Designed for Ease, Inside and Out

Easy Seals™ are designed with a softer metal alloy than traditional inlet base seals and are plated with twice as much gold, making proper installation easier – reduce strain on hands!

Traditional Stainless Steel Gold Plated Seals

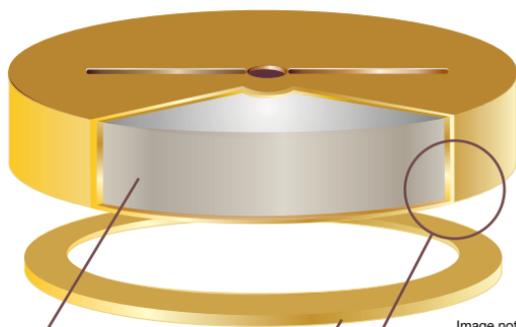


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Hard Stainless Steel

Requires greater force to compress tightly – difficult to seal **properly**

Thinner Gold Plating

Half the gold plating ($8\mu\text{m}$) and less inert than Easy Seals.

Washer Required

Extra hassle and cost from additional small parts needed to install

Using Restek Dual Vespel® Inlet Seals?

See how they stack up to Easy Seals in the Oxygen Test, a grueling test of leak prevention at high temperatures. p. 7

Vespel is a trademark of E.I. du Pont de Nemours and Co. Comparative data are not representative of all applications.

EASY!

Phenomenex Easy Seals™

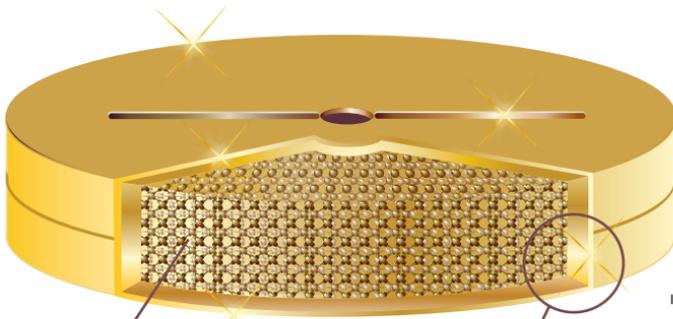


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Softer Metal Alloy

The proprietary metal alloy in Easy Seals is softer than traditional stainless steel seals and compresses easily when tightened – make proper seals with less strain!

Twice As Much Gold Plating

16 μm of gold plating is used to deactivate each Easy Seal, improving inertness and eliminating the need for a spacing washer, without compromising performance!

No Washer or Adaptor Required

Improve Reproducibility

Stainless Steel Seals Can Increase Variability

Creating an effective seal at the base of the inlet is dependent on the amount of force used. Gold plated stainless steel seals require extreme force to compress tightly and create a good seal, making them difficult to install **properly** every time.

Traditional Gold Plated Stainless Steel Seals

Good Install



Extreme force required to create a proper seal

- Can cause strain on hands
- May cause damage to injector fittings due to overtightening, resulting in expensive maintenance costs!

Bad Install



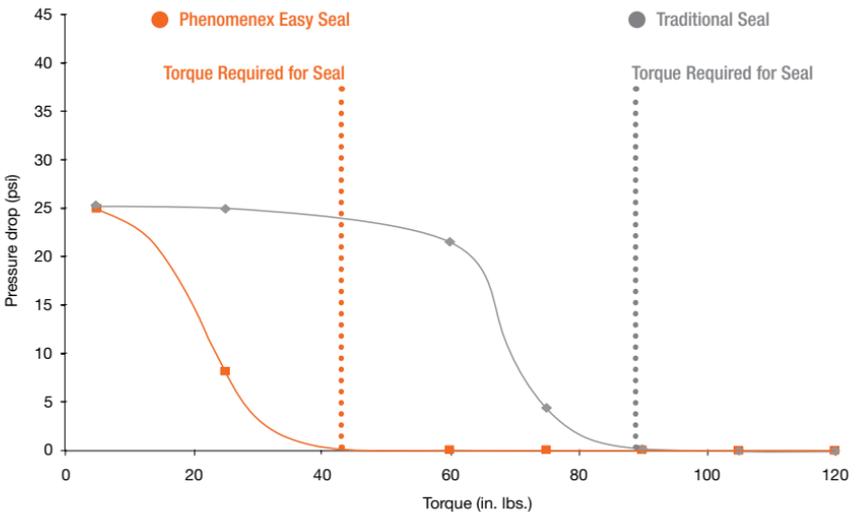
Not enough force to create a proper connection

- Allows leaks
- System pressure can fluctuate
- May cause oxygen contamination
- Potential to damage the column and destroy performance!



Easy Seals™: Leak-Tight at ½ the Torque

The soft metal alloy in Easy Seals easily compresses as it is tightened, allowing you to feel when a proper seal is made. Only half the torque is required to consistently create a tight connection compared to traditional gold plated stainless steel seals.



Conditions: Inlet pressure was set to 25 psi and the pressure drop was measured after 10 minutes. Pressure trend values listed represent the difference in pressure.

Share With Us

Tell us how easy your installation is at:

www.phenomenex.com/EasySeals



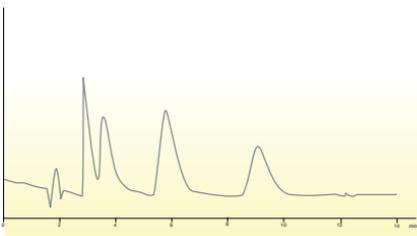
Prevent Leaks and Reduce Oxygen Damage

Leaks Can Destroy Chromatography — and Columns!

An inert flow path through the entire GC system is critical to achieving the best results for your analysis — that includes the seal at the base of the inlet! Leaks can allow air into the system and cause oxygen contamination, leading to:

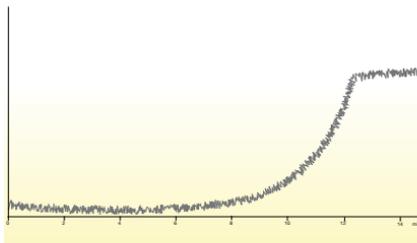
Difficult Quantitation

- Stationary phase damage can distort peak shape



Low Sensitivity

- Excessive bleed can lower signal-to-noise



Expensive Column Replacement

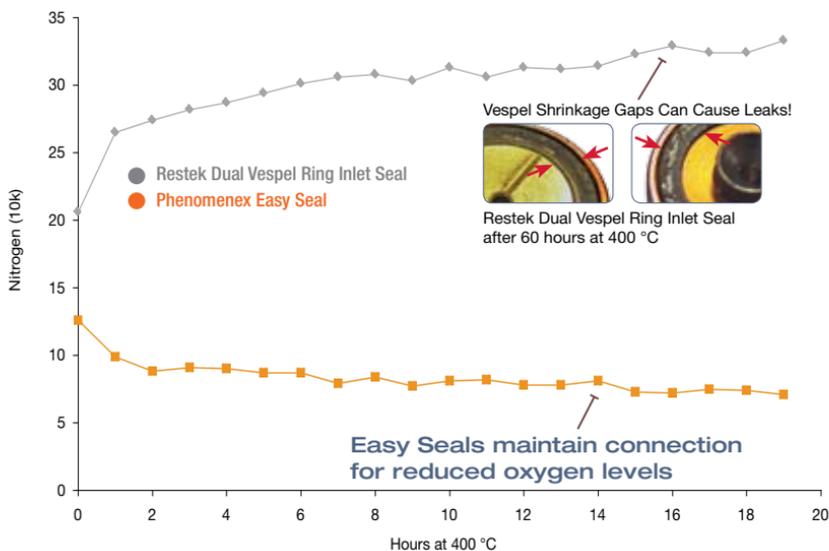
- Oxygen damage is irreversible and can only be fixed by replacing your column





The Oxygen Test: 20 Hours at 400 °C

Easy Seals™ are designed to create leak-tight connections that reduce the amount of oxygen entering the GC system, even up to 400 °C! Our testing showed that the Easy Seal maintained a good connection while the Restek Dual Vespel® Ring Inlet Seal showed increasing levels of oxygen in the system — increased potential for contamination!



Test Conditions: Both inlet base seals were new and unused prior to testing. Seals were installed in an Agilent® 6890 Series instrument with a 5973 MS with a Zebtron™ ZB-5ms GC column (15 meter x 0.25 mm x 0.25 µm). An initial air and water check was performed upon installation to ensure there was no error in installation. The inlet temperature was set to 400 °C and counts of oxygen were measured over time.

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Doing High Temperature Analysis?

Try Zebtron™ Inferno™ R&D 100 award-winning GC columns stable to 430 °C! Learn more at

www.phenomenex.com/GC

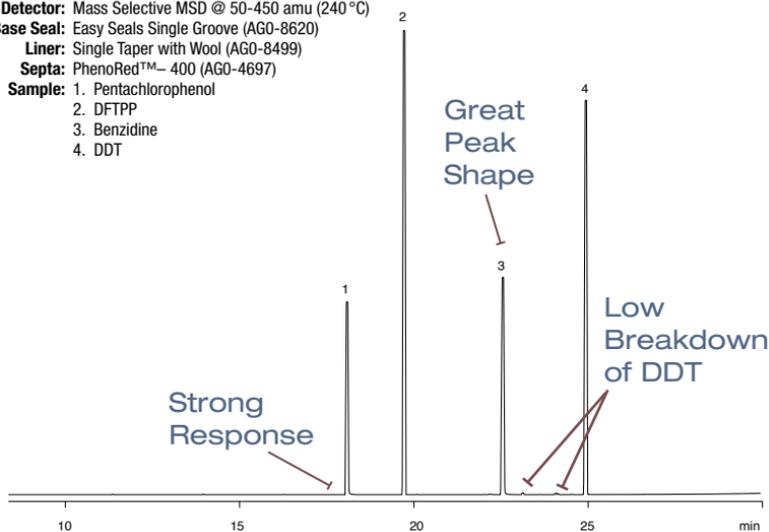
Reduce Inlet Activity

2x the Gold Plating

Easy Seals™ are deactivated with twice as much gold plating as traditional stainless steel inlet base seals, which helps you reduce activity and get the best performance from your GC column:

- Improved peak shapes for active compounds like acids and bases
- Better sensitivity and responses for trace analysis

Column: Zebron ZB-5ms
Phase: 5% Polysilarylene - 95% Polydimethylsiloxane copolymer
Dimensions: 30 meter x 0.25 mm x 0.25 µm
Part No.: 7HG-G010-11
Oven Profile: 45 °C to 320 °C @ 9 °C/min for 4 min
Carrier Gas: Constant Flow Helium, 1.24 mL/min
Injection: Splitless 1 µL @ 250 °C
Detector: Mass Selective MSD @ 50-450 amu (240 °C)
Inlet Base Seal: Easy Seals Single Groove (AG0-8620)
Liner: Single Taper with Wool (AG0-8499)
Septa: PhenoRed™- 400 (AG0-4697)
Sample: 1. Pentachlorophenol
2. DFTPP
3. Benzidine
4. DDT



Tip: Change Your Seal Regularly!

Inlet base seals may come in contact with the sample and should be frequently changed to prevent residue, adsorbed active compounds, septum cores, or other contamination from compromising your analysis.

Ordering Information

Easy Seals™ Inlet Base Seals for Agilent® GCs

Fits all Agilent 5000, 6000, and 7000 Series instruments, no adaptors needed!

Easy Seals

Part No.	Description	Unit
Standard, single groove for splitless applications, 0.8 mm dia. inlet hole		
AGO-8619	Easy Seal Inlet Base Seal, Gold Plated, for Agilent GCs	2/pk
AGO-8620	Easy Seal Inlet Base Seal, Gold Plated, for Agilent GCs	10/pk

guarantee

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Order Online!

Get the latest tips, tools, and exclusive promotions on GC accessories.

- Hundreds of applications
- GC technical notes, guides, and tips



www.phenomenex.com/GC



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Easy, Washerless, Leak-Tight



Easy Seals™

Inlet Base Seals

Easy, Leak-Tight Installation, No Washer Required!

For applications, technical guides, and other resources for GC analysis, visit:
www.phenomenex.com/GC

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