ENHANCE YOUR POLAR PEAK SHAPE
ACCURATE. SENSITIVE. REPEATABLE.

IMPROVED Agilent J&W HP-INNOWax and Intuvo HP-INNOWax GC columns

Now your analysis of polar compounds can be even more worry free

Flow path inertness is vital to any GC analysis. As the GC industry's most innovative measurement company, Agilent is uniquely positioned to ensure the inertness of every surface that touches your sample, so you can achieve the low detection levels that today's analyses demand.

The Agilent J&W Ultra Inert GC column family pushes industry standards for consistent column inertness and exceptionally low column bleed. The innovative processes, employed in the manufacture of Agilent J&W DB-Wax Ultra Inert columns, are now being applied to the production process for the HP-INNOWax GC columns.

As a result, the improved Agilent J&W HP-INNOWax and Intuvo HP-INNOWax GC columns now deliver:

- Excellent peak shape performance for active polar compounds
- Extended inertness lifetime that withstands repeated cycling to the upper temperature limits of the column
- Improved column-to-column inertness reproducibility and retention time stability

Other key performance parameters—such as selectivity, theoretical plates, and retention indices—remain unchanged for a seamless transition to improved HP-INNOWax GC columns.

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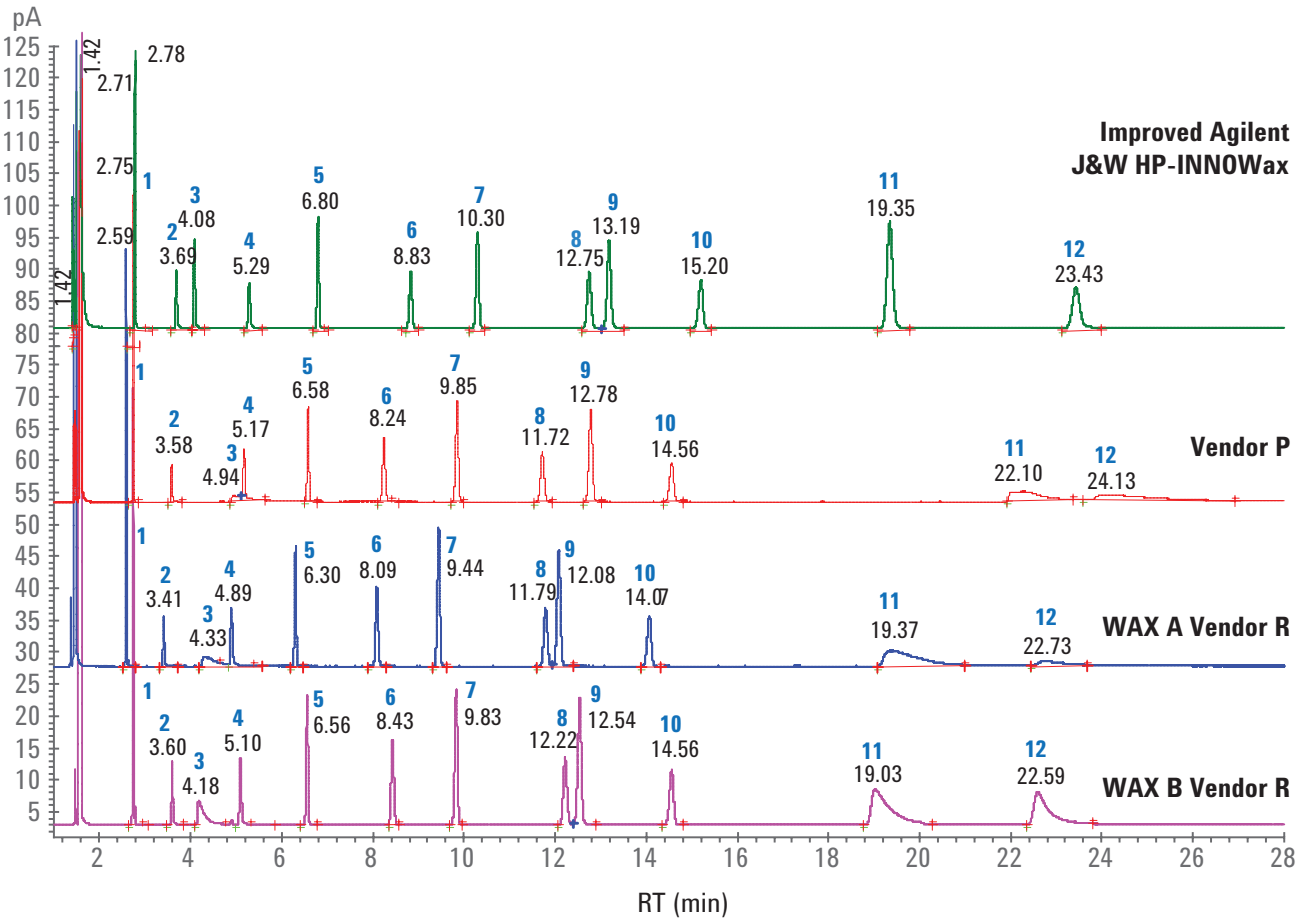
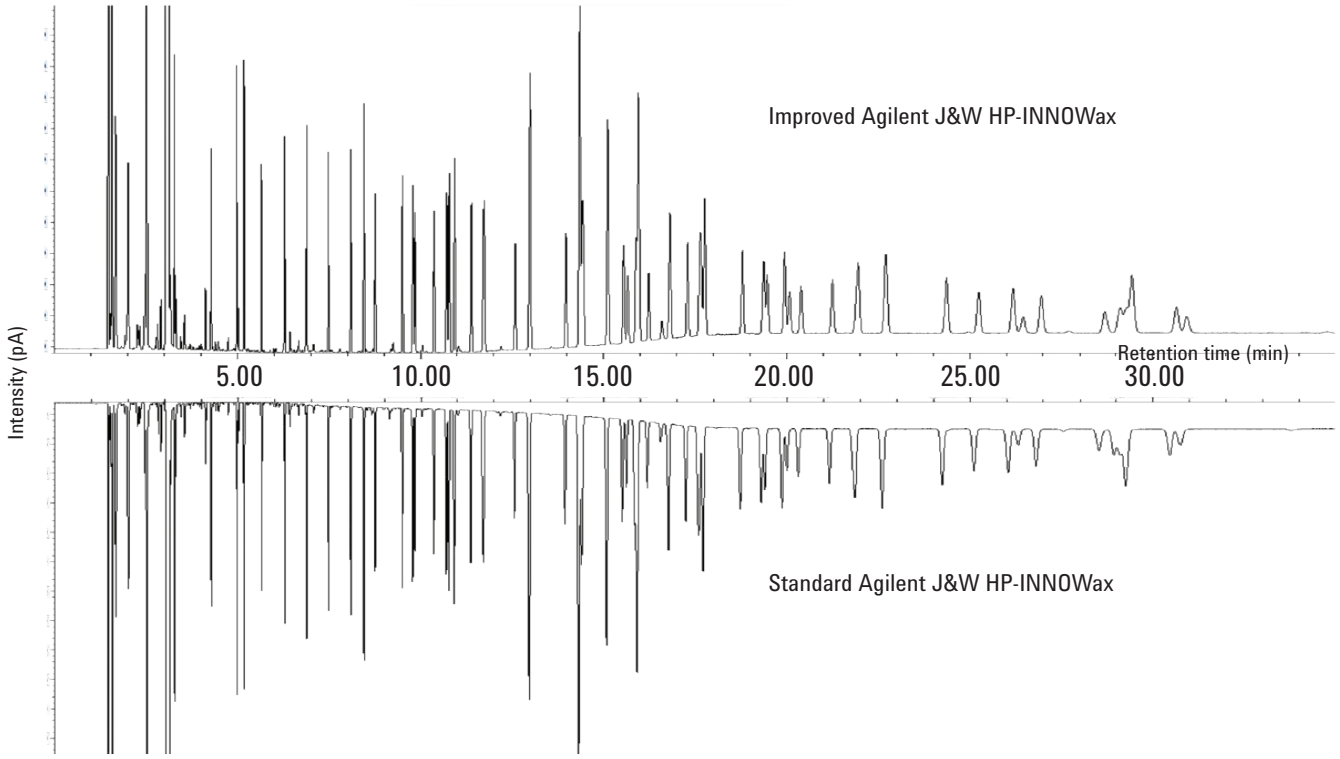
HP-INNOWax column inertness is maintained after prolonged heating at high temperatures using modified Grob mixture in dichloromethane. The inertness of competitor columns rapidly deteriorated during the longevity test at 250 °C.



FID chromatograms of the Wax Ultra Inert test mixture on improved Agilent J&W HP-INNOWax columns after conditioning for 50 hours at 260 °C, and a wide variety of PEG columns from different vendors after conditioning for 50 hours at 250 °C.

A strong test probe mixture can highlight deficiencies in column activity, while a weak mixture can actually mask such deficiencies. Each improved HP-INNOWax GC column that is manufactured is tested with a highly demanding test probe mixture ensuring that the columns have been properly deactivated, contain the correct amount of stationary phase, and have the same relative retention time - the test summary sheet is shipped with the column as proof of performance.

Identical retention times observed between standard and improved HP-INNOWax columns.



FID chromatograms of extended FAMEs Mixture 72 compounds retention time locked on improved and standard Agilent J&W HP-INNOWax columns

Conditions:

GC system	Agilent 7890B FID equipped
Autosampler:	Agilent G4513A, 10 µL syringe (p/n 5181-1267)
Columns:	Agilent HP-INNOWax 30 m × 0.25 mm, 0.25 µm (p/n 19091N-133 and 19091N-133i)
Inlet:	Inert flowpath split/splitless weldment (p/n G3970A)
Inlet temperature:	250 °C
Injection volume:	1 µL
Split ratio:	1:25
Carrier gas:	Hydrogen. Methyl stearate is retention time locked to 14.00 min, constant pressure mode (average linear velocity is approximately 35.6 cm/s at 50 °C)
Oven temperature:	50 °C, 1 min hold, 25 °C/min to 200 °C, 3 °C/min to 230 °C, 18 min hold
Detector temperature:	280 °C
Detector gases:	Hydrogen (40 mL/min), air (450 mL/min), nitrogen make-up gas (30 mL/min)
Flowpath supplies:	Ultra Inert low pressure drop liner (p/n 5190–2295) Ultra Inert gold seal (p/n 5190–6144)

The standard HP-INNOWax columns have been routinely used for years in many applications, therefore same selectivity between standard and improved versions is an important advantage for current users. It ensures an easy, fast, and simple column upgrade, with minimal method revalidation.

Improved Agilent J&W HP-INNOWax and Intuvo HP-INNOWax GC columns are part of the Agilent Ultra Inert GC Flow Path

As regulatory agencies drive limits of detection lower for increasingly active and more complex polar samples, you cannot afford adsorption caused by flow path activity.

- Having to repeat or verify suspect analyses wastes resources, hinders productivity, and hurts your bottom line.
- With limited available sample—and the clock ticking on sample viability—you might never even get a second chance to redo your analysis.
- Unreliable results can have catastrophic implications in terms of environmental safety, the quality of products we use every day, and the foods we eat.

By minimizing activity along every step of the GC and GC/MS flow path, Agilent Inert Flow Path solutions improve system performance, ensure better results, and allow you to process more samples without unplanned maintenance and recalibration. So you won't miss a thing in your GC analysis.

Ordering Guide

ID (mm)	Length(m)	Film(µm)	Temp Limits (°C)	7 in Cage	5 in Cage	7890/6890 LTM II module	Intuvo HP-INNOWax column
0.18	20	0.18	40 to 260/270	19091N-577i	19091N-577iE		
0.20	25	0.20	40 to 260/270	19091N-102i			
	50	0.20	40 to 260/270	19091N-105i			
		0.40	40 to 260/270	19091N-205i			
0.25	15	0.25	40 to 260/270	19091N-131i			
		0.50	40 to 260/270	19091N-231i			
	30	0.15	40 to 260/270	19091N-033i			
		0.25	40 to 260/270	19091N-133i	19091N-133iE	19091N-133iLTM	19091N-133i-INT
		0.50	40 to 260/270	19091N-233i	19091N-233iE		
	60	0.25	40 to 260/270	19091N-136i	19091N-136iE		
		0.50	40 to 260/270	19091N-236i			
0.32	15	0.25	40 to 260/270	19091N-111i			
	30	0.15	40 to 260/270	19091N-013i			
		0.25	40 to 260/270	19091N-113i	19091N-113iE		19091N-113i-INT
		0.50	40 to 260/270	19091N-213i	19091N-213iE		19091N-213i-INT
	60	0.25	40 to 260/270	19091N-116i			
		0.50	40 to 260/270	19091N-216i	19091N-216iE		19091N-216i-INT
0.53	15	1.00	40 to 240/250	19095N-121i			
	30	1.00	40 to 240/250	19095N-123i	19095N-123iE		
	60	1.00	40 to 240/250	19095N-126i			

Learn more about analyzing polar compounds with utmost confidence
www.agilent.com/chem/hp-innowax

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