

# APPLICATION

## Pheniramine and Halogenated Derivatives Separated with a Kinetex® 2.6 µm EVO C18 Core-Shell Column

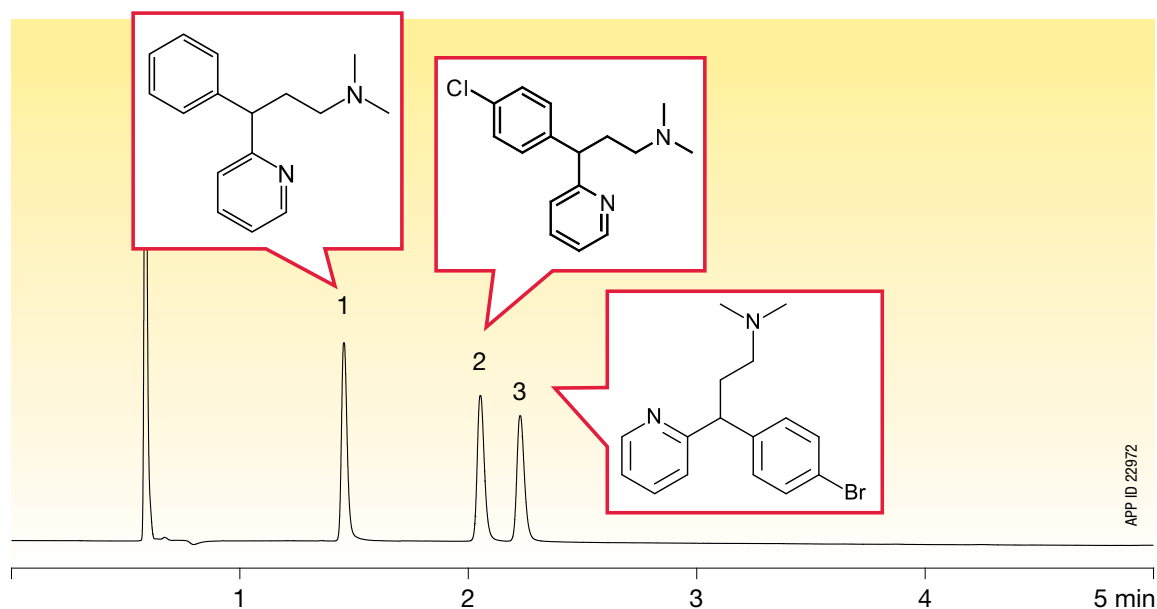
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### Overview

The antihistamines pheniramine, chlorpheniramine, and brompheniramine are active ingredients found in over-the-counter cold and allergy medicines. Under acidic conditions, the analysis of these basic compounds can be problematic for traditional fully porous and core-shell media as secondary interactions with the silica surface can result in peak tailing. To counteract this, high pH conditions can be used to neutralize these three antihistamines so they exhibit better hydrophobic retention. With its wide pH stability range, the Kinetex EVO C18 easily withstands these needed high pH conditions, while providing a quick separation of these similarly structured compounds. Additionally, the unique organo-silica layer of ethane cross-linking found within the Kinetex EVO C18 core-shell particles provides a highly inert surface that promotes excellent peak shape for these and other basic compounds.

### LC/UV Conditions

<b>Column:</b>	Kinetex 2.6 µm EVO C18	
<b>Dimensions:</b>	100 x 4.6 mm	
<b>Part No.:</b>	00D-4725-E0	
<b>Mobile Phase:</b>	A: 10 mM Ammonium bicarbonate (pH 10.2) B: Acetonitrile	
<b>Gradient:</b>	<b>Time (min)</b>	<b>% B</b>
	0	50
	4	60
<b>Flow Rate:</b>	1.25 mL/min	
<b>Temperature:</b>	Ambient	
<b>Detection:</b>	UV @ 210 nm	
<b>Sample:</b>	1. Pheniramine 2. Chlorpheniramine 3. Brompheniramine	



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## Ordering Information Kinetex<sup>®</sup> EVO C18 Core-Shell LC Columns

5 µm Minibore Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
00A-4633-AN	00B-4633-AN	00D-4633-AN	00F-4633-AN	AJO-9298
for 2.1 mm ID				

5 µm MidBore <sup>™</sup> Columns (mm)			SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
50 x 3.0	100 x 3.0	150 x 3.0	3/pk
00B-4633-YO	00D-4633-YO	00F-4633-YO	AJO-9297
for 3.0 mm ID			

5 µm Analytical Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	3/pk
00B-4633-E0	00D-4633-E0	00F-4633-E0	00G-4633-E0	AJO-9296
for 4.6 mm ID				

2.6 µm Minibore Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
30 x 2.1	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
00A-4725-AN	00B-4725-AN	00D-4725-AN	00F-4725-AN	AJO-9298
for 2.1 mm ID				

2.6 µm MidBore <sup>™</sup> Columns (mm)			SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
50 x 3.0	100 x 3.0	150 x 3.0	3/pk
00B-4725-YO	00D-4725-YO	00F-4725-YO	AJO-9297
for 3.0 mm ID			

2.6 µm Analytical Columns (mm)				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
50 x 4.6	100 x 4.6	150 x 4.6		3/pk
00B-4725-E0	00D-4725-E0	00F-4725-E0		AJO-9296
for 4.6 mm ID				

1.7 µm Minibore Columns (mm)			SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>†</sup>
50 x 2.1	100 x 2.1	150 x 2.1	3/pk
00B-4726-AN	00D-4726-AN	00F-4726-AN	AJO-9298
for 2.1 mm ID			

<sup>†</sup> SecurityGuard ULTRA Cartridges require holder, Part No.: AJO-9000

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Kinetex EVO is patented by Phenomenex. U.S. Patent Nos. 7,563,367 and 8,658,038 and foreign counterparts.

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