

# APPLICATION

## Methoxybenzene Isomers Separation Using a Kinetex<sup>®</sup> F5 Core-Shell LC Column

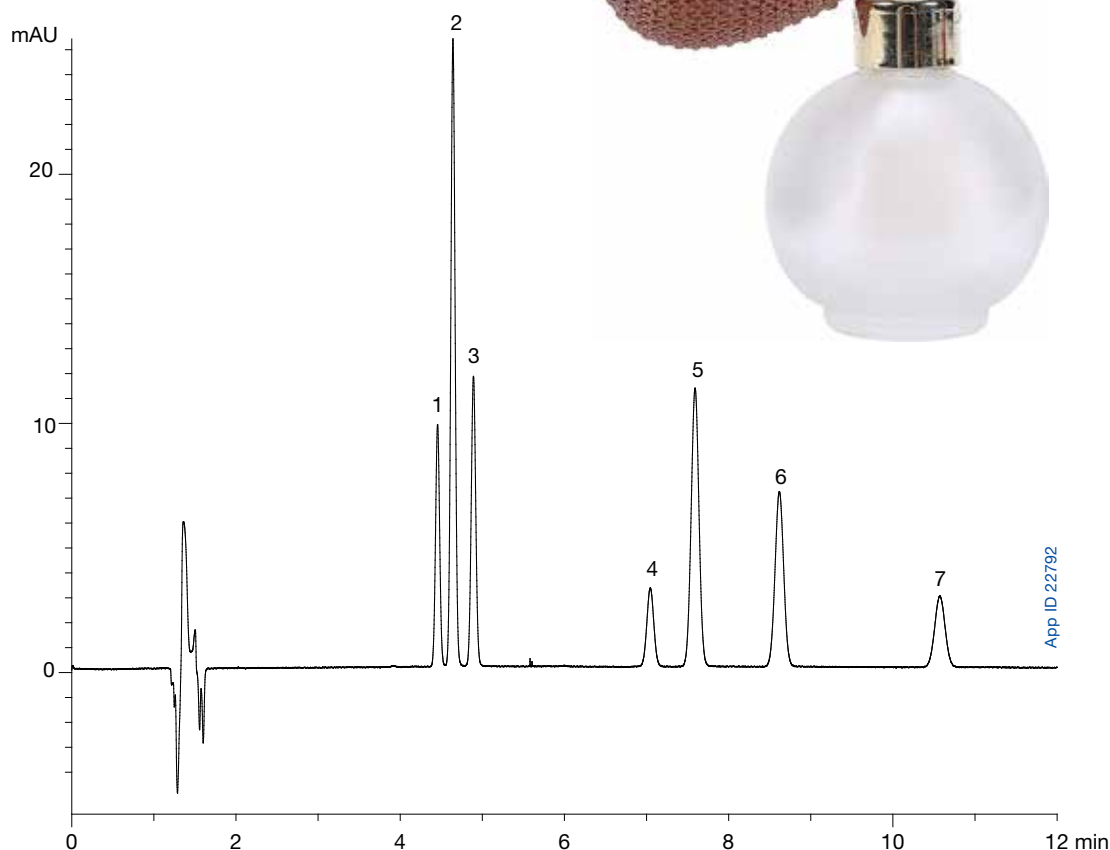
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### Overview

Methoxybenzene and its isomers have multiple commercial uses in the pharmaceutical, environmental, agricultural, and fragrance industries. They serve most importantly as precursors to a large number of synthetic compounds. Due to their similar weights and structures, these compounds are difficult to separate on conventional C18 stationary phases that focus solely on hydrophobic interactions. However, as demonstrated, the Kinetex 2.6  $\mu$ m F5 provides excellent separation with its combination of hydrophobic, aromatic, dipole-dipole, and hydrogen bonding interactions. This results in excellent resolution between compounds with a fast analysis time

### LC/UV Conditions

**Column:** Kinetex 2.6  $\mu$ m F5  
**Dimensions:** 150 x 4.6 mm  
**Part No.:** 00F-4723-E0  
**Mobile Phase:** A: 0.1 % TFA in Water  
 B: Acetonitrile  
**Isocratic:** A/B (65:35)  
**Flow Rate:** 1 mL/min  
**Temperature:** Ambient  
**Detection:** UV @ 254 nm  
**Sample:** 1. 1,2,3-Trimethoxybenzene  
 2. 1,2-Dimethoxybenzene  
 3. 1,2,4-Trimethoxybenzene  
 4. 1,4-Dimethoxybenzene  
 5. Methoxybenzene  
 6. 1,3-Dimethoxybenzene  
 7. 1,3,5-Trimethoxybenzene



App ID 22792



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## Kinetex<sup>®</sup> Ordering Information

1.7 µm Minibore Columns				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phase	50 x 2.1	100 x 2.1	150 x 2.1	3/pk
F5	00B-4722-AN	00D-4722-AN	00F-4722-AN	AJ0-9322 for 2.1 mm ID

2.6 µm Minibore Columns			SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phase	50 x 2.1	100 x 2.1	3/pk
F5	00B-4723-AN	00D-4723-AN	AJ0-9322 for 2.1 mm ID

2.6 µm MidBore <sup>™</sup> Columns			SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phase	50 x 3.0	100 x 3.0	3/pk
F5	00B-4723-Y0	00D-4723-Y0	AJ0-9321 for 3.0 mm ID

2.6 µm Analytical Columns				SecurityGuard <sup>™</sup> ULTRA Cartridges <sup>‡</sup>
Phase	50 x 4.6	100 x 4.6	150 x 4.6	3/pk
F5	00B-4723-E0	00D-4723-E0	00F-4723-E0	AJ0-9320 for 4.6 mm ID

‡SecurityGuard ULTRA Cartridges require holder, Part No.: AJ0-9000

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Find more information on Kinetex core-shell HPLC and UHPLC columns at:

[www.phenomenex.com/kinetex](http://www.phenomenex.com/kinetex)



If Phenomenex products in this technical note do not provide at least an equivalent separation as compared to other products of the same phase and dimensions, return the product with comparative data within 45 days for a FULL REFUND.

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