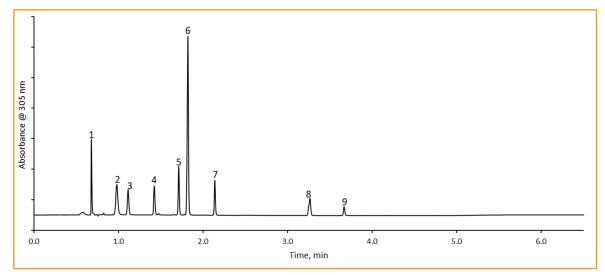


PHARMACEUTICALS



Omeprazole Analysis Using HALO® Elevate C18





TEST CONDITIONS:

Column: HALO 120 Å Elevate C18, 2.7 μm, 2.1 x 150 mm

Part Number: 92272-702

Mobile Phase A: Water + 0.1% Ammonium Hydroxide

(pH - 10.6)

Mobile Phase B: Acetonitrile Gradient: Time %B 0.0 13 3.3 53

3.8 53 3.9 13 9.0 13

Flow Rate: 0.4 mL/min Back Pressure: 311 bar Temperature: 60 $^{\circ}$ C Injection: 1 μ L

Sample Solvent: USP Diluent Wavelength: PDA, 305 nm

Flow Cell: 1 µL Data Rate: 40 Hz

Response Time: 0.05 sec.

LC System: Shimadzu Nexera X2

PEAK IDENTITIES:

- 1. Related Compound F & G
- 2. Related Compound B
- 3. Related Compound E
- 4. Related Compound A
- 5. Impurity B
- 6. Omeprazole
- 7. Impurity H
- 8. N'-Methyl Omeprazole
- 9. Impurity C

A separation of omeprazole, related compounds, and impurities is performed on the HALO® Elevate column. Using a high pH compatible stationary phase the separation is completed in less than 4 minutes. With a pKa of 9.3, omeprazole requires high pH for the best separations. By using the HALO® Elevate column at a pH of 10.6, a complete separation of 9 omeprazole related compounds and impurities is achieved.



